CONTENTS OF SUPPLEMENT.

PERSONAL 193
Obituary 193
ENGINEERING SOCIETIES 193
Coming Technical Meetings 193
NEW PUBLICATIONS 194
CONSTRUCTION NEWS:
Condensed List of Contracts Pending 194
Railways 195
Street and Electric Railways 195
Electric Light and Power 196
Bridges 196
Buildings 197
Water-Works 197
Irrigation 198
Sewerage 198
Garbage Disposal and Street Cleaning 198
Streets and Roads 198
Manufacturing Plants 199
Gas Plants 199
Miscellaneous Contracts 199
Contract Prices 199
INDUSTRIAL NOTES 200

PERSONAL.

Mr. G. F. Huff has been elected President of the West Virginia & Pennsylvania R. R., to succeed Mr. R. T. Lownd, resigned.

Capt. David Du B. Gaillard, Corps of Engineers, U. S. Army, has been appointed Colonel of the Third Regiment of Volunteer Engineers.

Mr. Collins P. Bliss, of the Engineering Department of New York University, New York city, was married June 1 to Miss Jessamine Coon, of Cleveland, O.

Civil Engineer C. W. Parks, United States Navy, has been detached from the New York Navy Yard and ordered to the Bureau of Yards and Docks, at Washington.

Mr. John Guilfoyle has been appointed Commissioner of Buildings, for the Borough of Brooklyn, New York city, to succeed Mr. Daniel Ryan, whose death was noted in our last issue.

Mr. William Boeh, formerly of the Trinidad Asphalt Paving Co., has been appointed Superintendent of the Water-Works Department of Cincinnati, O., to succeed Mr. Willis P. Tharp.

Major R. H. Elliott, of Birmingham, Ala., has been appointed Chief Engineer of a projected railway between Memphis, Tenn., and New Orleans, La., on the west side of the Mississippi River.

Mr. Edward L. Pinckard, civil engineer, until recently Engineer to the Board of Bond Trustees, of Jacksonville, Fla., has been appointed a Major in the United States Volunteer Engineer Corps.

Col. Henry T. Douglas, M. Am. Soc. C. E., Chief of the Topographical Survey, of Baltimore, Md., has been appointed a Brigadier-General in the United States Volunteers, by President McKinley.

Mr. W. D. Otis, General Roadmaster, and Messrs. A. S. Lippert, of Buffalo, A. S. Weston, of Watertown, and J. S. Caldwell, of Albany, Division Roadmasters of the New York Central & Hudson River R. R., have been retired from service.

Mr. Harvey C. Lowrie, M. Am. Soc. C. E., has been appointed Engineer to the Board of Public Works of Denver, Colo., to succeed Mr. Donald W. Campbell. Mr. Lowrie was City Engineer for a number of years.

Mr. Warren G. Purdy, First Vice-President, Secretary and Treasurer of the Chicago, Rock Island & Pacific Ry., with headquarters at Chicago, Ill., has been elected President of the same, to succeed Mr. R. R. Cable, who has been elected Chairman of the Board of Directors.

Mr. Edwin A. Miller has been appointed Chief Engineer of the Department of Parks for the Borough of Richmond, New York city, instead of the Boroughs of Manhattan and the Bronx, as reported last week. Mr. Daniel Ulrich, Assoc. M. Am. Soc. C. E., continues to be the Chief Engineer of the last-named borough.

Capt. Edward Burr, M. Am. Soc. C. E., Corps of Engineers, U. S. Army, formerly in the District Commissioners' Office, Washington, D. C., has been appointed Lieutenant-Colonel of the Second Regiment of Volunteer Engineers. Capt. William C. Langfitt, Corps of Engineers, has been appointed Major of this regiment.

Lieut.-Col. Hiram M. Chittenden, Corps of Engineers, U. S. Army, now Chief Engineer, U. S. Volunteers, has been ordered to Mobile, Ala., as Chief Engineer of the Fourth Army Corps. He will be succeeded by Lieut.-Col. Amos Stickney, Corps of Engineers, as Secretary and Disbursing Officer of the Missouri River District. Lieut.-Col. Geo. McC. Dorsey, Chief Engineer, U. S. Volunteers, has been ordered to duty at Tampa, Fla., as Chief Engineer of the Fifth Army Corps, and will be relieved by Major Jos. H. Willard, Corps of Engineers.

Mr. Edmund F. Van Housen, M. Am. Soc. C. E., Resident Engineer of the New York Central & Hudson River R. R., with headquarters at Rochester, N. Y., has been appointed Division Engineer of the Western Division, with headquarters in Buffalo, N. Y. Other appointments are: Mr. G. W. Bartlett to be Division Engineer of the Eastern Division, with headquarters in New York city; Mr. James C. Irwin, Jun. Am. Soc. C. E., Superintendent of the Hudson River Bridge Co. and Assistant Superintendent of Signals, to be Division Engineer of the Middle Division, with headquarters at Albany, N. Y.; and Mr. C. J. Parker to be Division Engineer of the Rome, Watertown & Ogdensburg R. R., with headquarters at Watertown, N. Y. Mr. George E. Ellis, Jun. Am. Soc. C. E., Signal Inspector of the Hudson Division, with headquarters at Spuyten Duyvil, N. Y., has been appointed Superintendent of Bridges, with headquarters in Rochester, N. Y.

Mr. G. W. Payne, Roadmaster of the Washington Division of the Southern Ry., with headquarters at Manassas, Va., has been transferred in the same capacity to the Columbia Division, to succeed Mr. G. W. Bartlett, who has been appointed Division Engineer of the New York Central & Hudson River R. R. Mr. C. E. Lindsay, Engineer of Maintenance of Way, of the Pennsylvania Lines West of Pittsburg, with headquarters at Cincinnati, O., has been appointed Roadmaster of the Washington Division of the Southern Ry., to succeed Mr. Payne.

Mr. Anecito G. Menocal, Civil Engineer, U. S. Navy, and M. Am. Soc. C E., has been tried by a court-martial on charges connected with his superintendence of work on Dry Dock No. 3, at the Brooklyn Navy Yard. This timber dock was a practical failure and large expenditures in repairs upon it were necessary. Mr. Menocal was charged with "culpable inefficiency in the performance of duty, and neglect of duty." The finding of the court, made public on June 1, strikes out the word "culpable," but convicts him on both charges and sentences him to "suspension from duty on furlough pay for three years." Eight of the nine members of the court, however, united in a recommendation for clemency. The Secretary of the Navy has not yet acted on the finding of the court.

Mr. William Barclay Parsons, M. Am. Soc. C. E., Chief Engineer of the Rapid Transit Commission, of New York city, has been appointed a Captain in the First Regiment, U. S. Volunteer Engineers. Among other appointments to this regiment are the following: Mr. Ira A. Shaler, M. Am. Soc. C. E., of New York city, to be Captain; Mr. Edward B. Ives, M. Am. Soc. C. E., of Philadelphia, Pa., to be Captain; Mr. Merritt H. Smith, Jun. Am. Soc. C. E., of the Engineering Finance Department, New York city, to be Captain; Mr. Arthur Haviland, M. Am. Soc. C. E., of New York city, to be Captain; Mr. David L. Hough, M. Am. Soc. C. E., of New York city, to be First Lieutenant; Mr. George W. Bramwell, M. Am. Soc. C. E., of New York city, to be First Lieutenant; Mr. Charles P. Kahler, of Baltimore, Md., to be Captain; Mr. Lawrence L. Gillespie to be Second Lieutenant; Second Lieutenant Robert J. Johnston, Corps of Engineers, U. S. A., to be Captain; and Mr. Maurice A. Viele, M. Am. Soc. C. E., Assistant Engineer, New Croton Aqueduct Commission, Katonah, N. Y., to be First Lieutenant.

OBITUARY.

Mr. Charles O'Dell, civil engineer, of Montreal, Que., died in Fredericton, N. B., May 27, aged 75.

Mr. John F. Parkhurst, Vice-President and General Manager of the Globe Iron Works Co., Cleveland, O., died June 2, aged 68.

Mr. Charles W. MacCord, M. E., son of Prof. C. W. MacCord, of Stevens Institute of Technology, died on June 5, after an operation for appendicitis, aged 26 years. He graduated as a mechanical engineer in June, 1894, from the Stevens Institute, and at once became a member of the editorial staff of "Power." Mr. MacCord published a treatise on slide valves in 1897, and was the author of a number of technical articles. He was unmarried.

Mr. Bernard Moebius, inventor of the electrolytic process of separating and refining gold and silver, which bears his name, died recently on the "Kaiser Wilhelm der Grosse," while on his way to his old home in Germany. He was born in Hartha, Saxony, in 1852, and received his education in chemistry and metallurgy in Germany. He engaged in mining in that country and in Austria, Spain and Mexico before settling in the United States. Several plants using his process are in operation in this country, the leading ones being in Perth Amboy, N. J., Pittsburg, Pa., and Denver, Colo.

Mr. Charles Edward Emery, M. Am. Soc. C. E., M. Inst. C. E., died at his residence in Brooklyn, N. Y, June 1, aged 60. He was born in Aurora, N. Y., and in 1861 entered the U. S. Navy as a Third Assistant Engineer on the U. S. S. "Richmond." He served under Farragut on the Lower Mississippi, and was at the siege of Charleston. He resigned from the Navy in 1867, and became a consulting engineer in all matters relating to steam engineering, having a wide practice as an expert, and was for a time Chief Engineer of the New York Steam Heating Co. He was a non-resident professor of Cornell University, and was Past President of the Society of Electrical Engineers, and was awarded a Telford medal for a paper presented to the Institution of Civil Engineers, of London. In 1879 the degree of Doctor of Philosophy was conferred upon him by the University of New York.

ENGINEERING SOCIETIES.

COMING TECHNICAL MEETINGS.

BROOKLYN ENGINEERS' CLUB.
June 9. Secy., A. J. Provost, Jr., 191 Montague St., Brooklyn, N. Y.
NORTHWESTERN TRACK AND BRIDGE ASSOCIATION.
June 10. Secy., D. W. Meeker, St. Paul, Minn.
NORTHWESTERN ELECTRICAL ASSOCIATION.
June 10. Annual meeting, Duluth, Minn. Secy., Theo. R. Mercein, 511 Montgomery Bldg., Milwaukee, Wis.
MONTANA SOCIETY OF ENGINEERS.
June 11. Secy., Albert S. Hovey, Helena, Mont.
INDIANAPOLIS ENGINEERING CLUB.
June 11. Secy, Edson F. Folsom, Indianapolis, Ind.
WESTERN SOCIETY OF ENGINEERS.
June 11. "Three Months Among the Engineering Works of England and France," Prof. N. O. Whitney. Secy., N. L. Litten, Monadnock Block, Chicago, Ill.
ENGINEERS' CLUB OF KANSAS CITY.
June 13. Secy., F. W. Tuttle, Baird Bldg., Kansas City, Mo.
LOUISIANA ENGINEERING SOCIETY.
June 13. "Landscape Engineering as Applied to Park Improvements," Capt. Geo. H. Grandjean. Secy., J. F. Coleman, 712 Union St., New Orleans, La.
DENVER SOCIETY OF CIVIL ENGINEERS.
June 14. Secy., W. B. Lawson, 36 Jacobson Bldg., Denver, Colo.
CIVIL ENGINEERS' CLUB OF CLEVELAND.
June 14. Secy., Wm. H. Searles, Case Library Bldg., Cleveland, O.
AMERICAN WATER-WORKS ASSOCIATION.
June 14-16. Annual meeting, Buffalo, N. Y. Secy., Peter Milne, 95 William St., New York city.
WESTERN FOUNDRYMEN'S ASSOCIATION.
June 15. Secy., B. M. Gardner, 1522 Monadnock Block, Chicago, Ill.
BOSTON SOCIETY OF CIVIL ENGINEERS.
June 15. Secy., S. E. Tinkham, City Hall, Boston, Mass.
MASTER CAR BUILDERS' ASSOCIATION.
June 15-17. Annual meeting, Saratoga, N. Y. Secy., Jno. W. Cloud, 974 Rookery, Chicago, Ill.
ENGINEERS' CLUB OF CINCINNATI.
June 16. Secy., J. F. Wilson, P.O. Box 333, Cincinnati, O.
AMERICAN SOCIETY OF CIVIL ENGINEERS.
June 15. "Origin of the Gulf Stream and Circulation of the Water in the Gulf of Mexico, with Special Reference to the Effect on Jetty Construction. Secy., C. W. Hunt, 220 W. 57th St., New York city.
ENGINEERS' CLUB OF COLUMBUS.
June 18. Secy., M. S. Hopkins, 14½ N. High St., Columbus, O.
TECHNICAL CLUB OF OMAHA.
June 20. Secy., J. Harry Lawrie, Omaha, Neb.
ENGINEERS' CLUB OF MINNEAPOLIS.
June 20. Secy., H. E. Smith, 1620 S. E. 4th St., Minneapolis, Minn.
AMERICAN RAILWAY MASTER MECHANICS' ASSOC'N.
June 20-22. Annual meeting, Saratoga, N.Y. Secy., John W. Cloud, 974 Rookery, Chicago, Ill.
ENGINEERS' SOCIETY OF WESTERN PENNSYLVANIA.
June 21. Secy., R. A. Fessenden, 410 Penn Ave., Pittsburg, Pa.
ENGINEERS' AND ARCHITECTS' ASSOCIATION OF SOUTHERN CALIFORNIA.
June 22. Secy., Frank H. Olmstead, Los Angeles, Cal.
ENGINEERING ASSOCIATION OF THE SOUTH.
June 23. Nashville, Tenn. Secy., C. B. Wilson, Nashville, Tenn.
CANADIAN ELECTRICAL ASSOCIATION.
June 28-30. Annual convention, Montreal. Secy., C. H. Mortimer, Confederation Bldg., Toronto, Can.
AMERICAN INSTITUTE ELECTRICAL ENGINEERS.
June 29. Secy., R. W. Pope, 26 Cortlandt St., New York city.
INTERNATIONAL MINING CONGRESS.
July 6-9. At Salt Lake City. Secy., W. D. Johnson, Salt Lake City, Utah.
AMERICAN SOCIETY OF R. R. SUPERINTENDENTS.
July 13-14. Annual meeting, Alexandria Bay, N.Y. Secy., C. A. Hammond, Asbury Park, N. J.

WESERN FOUNDRYMEN'S ASSOCIATION.—At the annual meeting held in Chicago on May 18, officers were elected as follows: President, G. H. Carver; Vice-President, A. M. Thompson; Treasurer, O. T. Stantial; Secretary, B. M. Gardner; Directors, A. M. Thompson, S. T. Johnston, W. L. Moore, C. A. Sercomb and W. A. Jones.

BOSTON SOCIETY OF CIVIL ENGINEERS.—This society held its regular meeting on May 18, with 74 members and visitors present. The society was presented with a portrait of Mr. Geo. L. Vose, one of its past Presidents, by several of its members connected with the Massachusetts Institute of Technology. Mr. Frank O. Whitney read the paper of the evening, entitled "Co-ordinate Survey of Boston." A large number of maps and diagrams, showing the work which has been accomplished under the Board of Survey Act of 1891, in relation to plotting a comprehensive street system in Boston, were exhibited.

S. E. Tinkham, Secy.

ENGINEERS' CLUB OF CINCINNATI.—At the meeting of this club held May 19 Mr. Schuyler Hazard read a paper entitled "Notes on American Railways," in which many interesting historical facts and considerable data pertaining to the building of early American railways was presented. The early forms of construction of track, structures, rolling stock, etc., were described and illustrated by numerous old cuts, drawings and some specimens of rails. Reference was made to the pioneer engineers and others interested in our early railways.

J. F. Wilson, Secy.

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.—The secretary of this association, Mr. E. W. Putnam, has just issued a circular calling attention to the 50th anniversary meeting, which will be held in Boston, Mass., Aug. 22-27. Invitations will be sent to many foreign scientists and foreign educational and scientific institutions. During the Association week and the few days immediately preceding, a number of affiliated societies will meet in Boston, greatly increasing the attendance and interest in the convention. The circular also includes a list of the officers and the members of all special committees.

AMERICAN CHEMICAL SOCIETY.—The New York section of this society held its final meeting of the season June 3. The following papers were read and discussed: "A Preliminary Note of the Titaniferous Magnetites of Eastern Ontario," F. J. Pope; "A Comparison of Some Methods Used for the Determination of Starch," E. J. Levine; "Note on a Convenient Method Used for Maintaining Reductions of Ferrous Solutions," N. S. Meyers; "Slag Cements," C. F. McKenna. The following officers were elected for the ensuing year: Chairman, Wm. McMurtrie; Secretary and Treasurer, Durand Woodman; Executive Committee, Albert C. Hale, Chas. A. Doremus, A. A. Breneman; Delegates to Scientific Alliance, M. T. Bogart and E. A. Smith.

ENGINEERS' CLUB OF ST. LOUIS.—The 474th meeting of this club was held on June 1. Prof. J. B. Johnson stated that replies had been received in response to the telegram sent by the society to the Secretary of War, which indicated that a regiment of engineers was to be raised in the Mississippi Valley.

Mr. Charles Carroll Brown then read a paper entitled "The Ethics of Engineering," in which, after defining ethics, the subject was discussed. The rise of the learned professions from the priests was traced. It was stated that the standard of ethics in business and professional life was lower at the present time than formerly, and the reasons for this were given. The paper closed with a plea for the necessity for a code of ethics in the engineering profession. In the discussion which followed, several of the members differed with the author of the paper as to the necessity of a code of ethics and contended that the standard of ethics in the engineering profession had always been a high one. Richard McCulloch, Secy.

WESTERN SOCIETY OF ENGINEERS.—At the meeting held June 1 a paper entitled "Obstructive Bridges and Docks of the Chicago River" was read by Mr. G. A. M. Liljencrans. The paper pointed out the serious obstructions to navigation by large vessels caused by bridge piers and projecting docks, which encroach upon the channel. It was illustrated by a number of plans of these obstructions, and drawings of the minor improvements being carried out by the U. S. Government in the way of cutting off projections and widening the channel at sharp bends. These were followed by a number of views showing the manner of treating commercial waterways in Europe. The author considered that the main improvement to be carried out by lowering the tunnels and removing the channel piers of the drawbridges must be done by the city. He suggested that some large and comprehensive scheme for a broad and deep channel with masonry walls should be definitely adopted, and then gradually put into effect as means will allow.

The discussion turned mainly on the sizes of lake steamers, and some doubt was expressed as to the necessity of providing accommodation for the largest vessels, which are for special traffic. Mr. Liljencrans, however, pointed out the great increase in size of steamers for all kinds of traffic, and thought that any improvement scheme should be based on probable future requirements rather than on present conditions. Mr. E. E. R. Tratman referred to the work done at Glasgow, Scotland, where municipal enterprise had changed a small shallow river into a fine navigable stream, and had practically created one of the largest ports of Great Britain. He also thought the Chicago problem ought to be dealt with in a broad-minded way, and not by continual petty tinkering at various points.

A paper on "The Measuring Apparatus of the Kings County Survey," by Mr. Samuel McElroy, was then read by the Secretary.

AMERICAN WATER-WORKS ASSOCIATION.—The 18th annual convention of this association will be held at the Hotel Iroquois, Buffalo, N. Y., June 14-16. Several interesting excursions have been arranged, which will be distributed over the four convention days, thus affording pleasant interruptions of the business of the meeting. The first will be on the afternoon of June 15, consisting of a tour of inspection of the water-works of Buffalo. The following day a short trip will be taken down the Niagara River to continue the inspection of the water-works. June 17 practically the entire day will be given up to an excursion to Syracuse, N. Y.; June 18 a trip to Lockport and Niagara Falls is planned. The following is the list of papers which will be presented: "Compensating Reservoirs for Gravity Water Supplies in Lieu of Compensation for Riparian Rights and its Legal Aspects," S. E. Babcock, Little Falls, N. Y.; "Notes on the Extension of the Minneapolis Water-Works System," F. W. Cappelen, Minneapolis, Minn.; "Some Information," F. A. W. Davis, Indianapolis, Ind.; "Furnishing Water," William Himrod, Erie, Pa.; "Cast-Iron Water Pipe," Chas. Hermany, Louisville, Ky.; "Some of the Early Methods of Collecting, Storing and Distributing Water," Wm. R. Hill, Syracuse, N. Y.; "Water Meters and Rates," John B. Heim, Madison, Wis.; "A Note Concerning Mechanical Filtration" (Lantern Slide Illustrations), Prof. Wm. P. Mason, Troy, N. Y.; "Experience with Vegetable Growth in Ground Water," Owen T. Smith, Freeport, Ill.; "The Removal of Sources of Pollution from a Surface Water Supply," M. R. Sherrerd, Newark, N. J.; "My Experience in Filtration and Aeration," S. A. Charles, Lexington, Ky.; "Care and Management of Small Water-Works Plants," W. F. Wilcox, Jackson, Miss.; "Specifications for Cast-Iron Pipe, etc., at Water-Works Lettings," P. D. Wanner, Reading, Pa.; "Pipe Inspection," T. W. Yardley, Chicago, Ill.; "Testing a System of Distribution," Jas. E. Haring, C. E., Nyack, N. Y.; "Free Water for Private Baths," L. N. Case, Detroit, Mich.; "An Oil Filter for Boiler Feed Water," Dabney H. Maury, Jr., Peoria, Ill.; "Deep Well Pumping Machinery," D. W. Mead, Rockford, Ill.; "Legal Responsibilities of Water Companies for Loss of Life by Drowning in their Reservoirs," E. S. Wills, Atchison, Kan.; "Method of Cleaning Reservoirs," Dow R. Gwinn, Quincy, Ill.; "Standpipe and its Brick Casing," W. H. Laing, Racine, Wis.; "Municipal Franchise Contracts," H. E. Keeler, M. E., Chicago, Ill.; (possibly a paper of interest), Prof. E. C. Smith, Beloit, Wis.; "A Method of Introducing Service Pipes without Trenching," Griffin Taylor Latta, Ludlow, Ky. Peter Milne, Secy.

NEW PUBLICATIONS.

LITERARY MAGAZINES.—The three great English Reviews which come to our desk all give evidence of the extent to which the war in which this country is now engaged is exciting interest in England. The "Fortnightly" for May opens with a paper on "The Collision of the Old World and the New," in which the writer directly advocates the formation of an Anglo-American Alliance and points out the great benefits not only to both the parties to such an agreement but to the world at large that might result from it. In the "Nineteenth Century," John Macdonnell, Master of the Supreme Court, writes on England's duties as a neutral, and explains some of the matters of international law that are now in such prominence. The "Fortnightly" has two papers designed to give Englishmen an idea of the terrible state of affairs in Cuba, out of which the present war has grown, and the position of the United States, its people and its rulers toward Cuba and toward Spain. It is certainly true that at the present time the English people alone among the nations of Europe understand, in a fair degree, the real spirit in which the United States entered upon and is carrying on this war. China and British interests there are only second in interest in these magazines to the Spanish-American affray. Other articles that deserve note here are an instructive review of the growth of the world's armaments in the "Nineteenth Century." The author shows most forcibly the enormous burden of taxation and forcible military service under which the nations of Europe are suffering, by reason of their colossal expenditures on national defense. There is a lesson here for this country that we shall do well to ponder. In the same magazine a writer presents a wholesale indictment of the business of corporation promoting as it is now carried on in England. The "Fortnightly" contains an interesting paper on life in Havana, and other cities of Cuba, which, coming from an unbiased source, might be read with profit by those who wish to know the real conditions that have existed on the unhappy island for a half-century past.

In the "Pall Mall Magazine" for June appears another instalment of the series on "The Evolution of Comfort in Railway Travel." American passenger cars are now taken up and Mr. Angus Sinclair is the capable writer who tells the story. In the series on "Capitals of Greater Britain," McLeod Stewart writes on Ottawa. "Harper's" for June opens with a long paper by Julian Ralph, on "The Czar's People," describing his journeys in Russia. The articles which will attract most attention in the number, however, are "Current Fallacies upon Naval Subjects," by Captain A. T. Mahan, and "A Century of Cuban Diplomacy," by Professor Albert Bushnell Hart. The latter especially deserves to be read and read carefully by every thoughtful American. We can say the same, however, of still another "Harper" paper, "The Situation in China," in which the need that the United States should take vigorous steps to protect its great and valuable trade with Asia is set forth.

The June "Atlantic" contains a paper on "The Uncertain Factors in Naval Conflicts," by Prof. Ira N. Hollis, of Harvard University, who was at one time an engineer in the navy. The opening article in the magazine, entitled "The War with Spain and After," is a serious review of the circumstances which led up to the present conflict, and of the new situations and new problems with which the country is now called upon to cope.

Two of the June magazines, "McClure's" and the "Review of Reviews," give up nearly all their space to war articles. The most notable papers in the former are "Cuba under Spanish Rule," by Gen. Fitz Hugh Lee, and "With the Greek and Turkish Armies in Time of War," by Gen. Miles. In the "Review of Reviews" much space is devoted to the Philippine Islands, a subject on which most Americans are none too well informed.

In "Scribner's" for June "Seaside Pleasure Grounds for Cities" are described by Sylvester Baxter. The article gives especial prominence to the work done in the vicinity of Boston under direction of the Metropolitan Park Commission in providing great free pleasure grounds on the beaches which skirt Boston Harbor. The official reports of this work have recently been commented on in this journal. In the "Cosmopolitan" Mr. Chas. E. Tripler, whose work in the production of liquid air was described in a recent issue of Engineering News, writes on his invention and its uses. His remarks concerning the probable useful applications of liquid air seem in several respects to be rather wide of the mark, to say the least. Gen. Greely writes on "Previous Expeditions to Tropical Countries," and tells of the disasters by disease that befell an English expedition against Cuba in June, 1762. He points out, however, that modern medical and sanitary science will probably go far to make tropical warfare endurable by natives of the temperate zone.

In the "Popular Science Monthly" Prof. D. R. McAnally writes on the "Roman Highways," which, from his accounts, were, as a rule, paved with stone blocks. His remark that mountains were frequently tunneled by the Romans in making their highways will be a surprise, we think, to most readers, and we doubt whether his statements on this point are well founded.

The "Century" for June makes another try at a colored cover, and succeeds as admirably as it failed in its May number. The article of greatest interest in this number is an account of the famous Spanish Armada by Wm. F. Tilton, with an introduction by Capt. A. T. Mahan, U. S. N. Other articles of great interest at the present time are "Ten Months with the Cuban Insurgents," and "The Confederate Torpedo Service, by its Electrician."

In "The North American Review" Senator Morgan asks "What Shall We Do with the Conquered Islands?" and says in effect that we should keep and govern them wisely and justly until they are able to govern themselves. There are several other articles called forth by the war in this magazine, and among other papers deserving mention are "The Carrying Trade of the Lakes," by Allan Hendricks, and "Our Export of Corn," by John M. Stahl.

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Bids to be opened.	Work.	Place.	See Eng. News
June 9.	Artesian well, Norwood, Pa.		June 2
	Advertised, Engineering News, June 2.		
June 9.	Pipe sewers, Baraboo, Wis.		June 2
June 9.	Roadway, walks, etc., New York		June 2
June 9.	Macadamizing, New Haven, Conn.		June 2
June 9.	Water-works, Pipestone, Minn.		May 26
June 9.	Electric light plant, Fairfield, Ill.		May 26
June 9.	Water pipe, Chicago Junction, O.		May 26
	Advertised, Eng. News, May 26 and June 2.		
June 9.	Water-works, Sharpsville, Pa.		May 19
	Advertised, Engineering News, May 19.		
June 9.	Paving (8 streets), Newark, N. J.		June 9
June 9.	Highway, Hancock, Mass.		June 9
June 10.	Brick paving, Saginaw, Mich.		June 9
June 10.	Pumping plant, Rome, N. Y.		June 9
June 10.	Steel bridges (6), Waseca, Minn.		June 9
June 10.	Bonds, Columbus, O.		June 9
June 10.	Storm sewer, Cedar Rapids, Ia.		June 2
June 10.	Highway bridge, Argenta, Ill.		June 2
June 10.	Brick sewers, Iowa City, Ia.		June 2
June 10.	Repairing sewer, St. Louis, Mo.		June 2
June 10.	Graveling, grading, etc., Athens, O.		June 2
June 10.	Brick paving, Holyoke, Mass.		June 2
	Advertised, Engineering News, June 2.		
June 10.	Macadam road, Rockhill, Conn.		June 2
June 10.	Brick paving, Troy, N. Y.		June 2
June 10.	Elevator, Abercrombie, N. Dak.		June 2
June 11.	Macadamizing, etc., East Haddam, Conn.		June 2
June 11.	Granite arch bridge, Brattleboro, Vt.		June 2
June 11.	Street work, Washington, D. C.		June 2
June 11.	Road, Huntington, W. Va.		May 19
June 11.	Army building, etc., Seattle, Wash.		May 19
June 11.	Brick paving, Swanton, O.		May 26
	Advertised, Engineering News, May 26.		
June 11.	School building, Ludlow Falls, O.		June 2
June 11.	Sewers, Zanesville, O.		June 9
June 11.	Street bonds, Saginaw, Mich.		June 9
June 13.	School building, Syracuse, N. Y.		June 9
June 13.	Brick paving, Curwensville, Pa.		June 9
June 13.	Academy building, Utica, N. Y.		June 9
June 13.	Wooden bridge, Brownsville, Tex.		June 9
June 13.	Trunk sewer, Cincinnati, O.		June 9
June 13.	Sewers, Indianapolis, Ind.		June 9
June 13.	Pipe sewers, Middletown, Ind.		June 9
June 13.	School building repairs, New York, N. Y.		June 9
June 13.	Life saving stations, Washington, D. C.		June 9
June 13.	Street bonds, Hornellsville, N. Y.		June 9
June 13.	Macadamizing, Proviso, Ill.		June 9
June 13.	Brick paving, curb, etc., So. Bend, Ind.		May 19
June 13.	Pipe sewer (2,750 ft.), Lafayette, Ind.		May 19
June 13.	Pipe sewers (2 streets), South Bend, Ind.		May 19
June 13.	Stone block paving, Toledo, O.		May 26
June 13.	Pipe sewers, Toledo, O.		June 2
June 13.	Water pipe, Cleveland, O.		June 2
June 13.	Sewers, Lapeer, Mich.		June 2
June 13.	Pipe sewers, Pontiac, Ill.		June 2
	Advertised, Engineering News, June 2.		
June 13.	Buildings, Kanawha, W. Va.		June 2
June 13.	School building, Wapakoneta, O.		June 2
June 13.	Water pipe, Washington, D. C.		June 2
	Advertised, Engineering News, June 2.		
June 13.	Grading, Wharton, Tex.		June 2
June 13.	Court house repairs, Wharton, Tex.		June 2
June 14.	Plans for bridge, Tuckahoe, N. J.		June 2
	Advertised, Eng. News, June 2 and 9.		
June 14.	Brick sewers, Springfield, Mass.		June 2
	Advertised, Eng. News, June 2 and 9.		
June 14.	Pipe sewers (2,500 ft.), Rahway, N. J.		June 2
June 14.	Truss bridge, Columbus, O.		May 26
June 14.	Brick paving, Binghamton, N. Y.		May 26
June 14.	Stone substructure, Mercer, Pa.		May 26
June 14.	Iron fence, Northampton, Mass.		May 26
June 14.	Steam heating plant, Wahpeton, N. Dak.		May 26
June 14.	Bridge and viaduct, Middletown, O.		June 2
June 14.	Repairing of bridges, Elkader, Ia.		June 9
June 14.	Stone bridges (2), Guthrie Center, Ia.		June 9
June 14.	Granite paving, Portland, Me.		June 9
June 14.	School building, Orange, Cal.		June 9
June 14.	Court and jail buildings, Anaconda, Mont.		June 9
June 14.	Macadamizing, Bedford, Ind.		June 9
June 14.	Stone arch, Delphos, O.		June 9
June 14.	Piers and abutments, Buffalo, N. Y.		June 9
June 14.	Asphalt paving, Troy, N. Y.		June 9
June 14.	Paving, Rochester, N. Y.		June 9
June 14.	Lumber, etc., Chicago, Ill.		June 9
June 15.	Sewers, Chicago, Ill.		June 9
June 15.	Piling, dredging, etc., Boston, Mass.		June 9
June 15.	Lateral sewers, Meadville, Pa.		June 9
June 15.	Brick, clay, etc., Jersey City, N. J.		June 9
June 15.	Bridges (22), Marion, Ia.		June 9
June 15.	Paving, Uhrichville, O.		June 9
June 15.	River work, Sandwich, Mass.		June 9
June 15.	Park work, Middletown, Conn.		June 9
June 15.	Fire hose, New York, N. Y.		June 9
June 15.	Bridge, Paxton, Ill.		June 9
June 15.	School bonds ($85,000), Camden, N. J.		June 9
June 15.	Sidewalks, grading, etc., Middletown, Conn.		June 9
June 15.	Brick paving, Newport, Ky.		June 9
	Advertised, Engineering News, June 9.		
June 15.	School building plans, Shreveport, La.		May 26
June 15.	Jail building, Charlotteville, Va.		May 26
June 15.	Municipal building, Stratford, Ont.		May 26
June 15.	Pump, gas engine, etc., Oil City, Pa.		May 12
	Advertised, Eng. News, May 12 to 26.		
June 15.	Railway, Robson, B. C.		June 2
June 15.	Bridge and plans, Owosso, Mich.		June 2
June 15.	Pipe sewers (5,600 ft.), Elizabeth, N. J.		June 2
June 15.	Road work, Elizabeth, N. J.		June 2
June 16.	Levee work, New Orleans, La.		June 2
June 16.	Sewers (4 miles), North Tarrytown, N. Y.		June 2
	Advertised, Engineering News, June 2.		
June 16.	Steel bridges (2), Towanda, Pa.		June 2
June 16.	Ice plant, Dayton, O.		June 2
June 16.	Paving, curbing, etc., Owasso, Mich.		June 2
June 16.	Army buildings, New London, Conn.		May 26

June 16. School building, Onslow, Ia. ..... May 26
June 16. Iron bridges (4), Mercer, Pa. ..... May 26
June 16. Paving, Owasso, Mich. ..... May 26
Advertised, Eng. News, May 26 and June 2.
June 16. Pipe sewers, Buffalo, N. Y. ..... June 9
June 16. Bonds, Avalon, Pa. ..... June 9
June 16. Hospital building, Binghamton, N. Y. ..... June 9
June 16. Grading, etc., Wilton, Conn. ..... June 9
June 16. Paving, Norwich, N. Y. ..... June 9
Advertised, Engineering News, June 9.
June 16. Brick paving, Carnegie, Pa. ..... June 9
June 17. Asphalt paving, (1 street), Saginaw Mich. ..... June 9
June 17. Electric lighting, Sea Isle City, N. J. ..... June 9
June 17. Bridge, Newaygo, Mich. ..... June 9
Advertised, Engineering News, June 9.
June 17. Water pipe, castings, etc., Saginaw, Mich. ..... June 9
June 17. Masonry subway, Newark, N. J. ..... June 9
Advertised, Engineering News, June 9.
June 17. Bridge (125 ft. long), Delaware, O. ..... June 9
June 17. Sewer soundings, Lansdowne, Pa. ..... June 9
Advertised, Engineering News, June 9.
June 17. Sewers, Cambridge Springs, Pa. ..... June 2
June 17. Court house, Savannah, Mo. ..... June 2
June 17. Court house, Hillsdale, Mich. ..... June 2
June 18. Water bonds ($25,000), Monrovia, Cal. ..... June 2
June 18. Asphalt paving, Zanesville, O. ..... May 26
June 18. Street work, Marietta, O. ..... May 26
June 18. Electric light plant, Fitzgerald, Ga. ..... May 5
June 18. Water-works, etc., Fitzgerald, Ga. ..... May 5
June 18. Gravel road, Valparaiso, Ind. ..... June 9
June 18. Passenger elevator, Danville, Ill. ..... June 9
June 18. Plumbing, heating, etc., Danville, Ill. ..... June 9
June 18. Park work, New York, N. Y. ..... June 9
June 18. Street sprinkling, Evansville, Ind. ..... June 9
June 18. Brick paving, etc., Cleveland, O. ..... June 9
June 20. Improving creek, Tiffin, O. ..... June 9
June 20. Laying water pipe, Brookline, Mass. ..... June 9
Advertised, Engineering News, June 9.
June 20. Refrigerator, New York, N. Y. ..... June 9
June 20. Building road, Clinton, Mass. ..... June 9
Advertised, Engineering News, June 9.
June 20. Electric light franchise, Odell, Ill. ..... June 9
June 20. Bridge abutments, Lebanon, O. ..... June 9
June 20. Water-works, Fertile, Minn. ..... June 9
June 20. Pumping franchise, Odell, Ill. ..... June 9
June 20. Surface condenser, etc., Asbury Park, N. J. ..... June 9
Advertised, Eng. News, June 9 and 16.
June 20. Pumping engine, Perth Amboy, N. J. ..... June 9
June 20. Steel fixtures, Mount Vernon, O. ..... June 9
June 20. Street work, Canton, O. ..... June 9
June 20. Water-works bonds, Prescott, Ariz. ..... May 26
June 20. Bonds, Berea, O. ..... May 26
June 20. Cleaning streets, Washington, D. C. ..... May 26
June 20. Light station, Oswego, N. Y. ..... May 26
June 20. School building, Glenville, O. ..... June 2
June 20. Water tank, Yankton, S. Dak. ..... June 2
June 20. Macadamizing, Morristown, N. J. ..... June 2
June 21. Electric light plant, Wellington, O. ..... June 2
Advertised, Eng. News, June 2 to 16.
June 21. Hospital building, Sandusky, O. ..... June 2
June 21. Brick paving, De Kalb, Ill. ..... June 2
Advertised, Eng. News, June 2 and 9.
June 21. Water bonds ($3,000), Greenwich, O. ..... May 26
June 21. Park conservatory, Milwaukee, Wis. ..... June 9
June 21. School building, Sherburne, Minn. ..... June 9
June 21. Water bonds ($5,000), Delphos, O. ..... June 9
June 22. Brick paving and curb, Meadville, Pa. ..... June 9
June 22. Buildings, Lawrence, Kan. ..... June 9
June 22. Pipe sewers, Tamaqua, Pa. ..... June 9
June 22. Street work, Hoboken, N. J. ..... June 9
June 22. Masonry substructure, Youngstown, O. ..... May 26
June 22. Reformatory building, Mansfield, O. ..... May 26
June 22. Garbage bonds, etc., Milwaukee, Wis. ..... May 26
June 22. Water-works, etc., Wellington, O. ..... June 2
Advertised, Eng. News, June 2 to 16.
June 22. Sewerage system, Concord, Mass. ..... June 2
Advertised, Eng. News, June 2 and 9.
June 22. Bridge, Youngstown, O. ..... June 2
June 23. Pier, dredging, etc., Cleveland, O. ..... May 26
Advertised, Eng. News, May 26 to June 16.
June 23. Post office building, San Francisco, Cal. ..... May 26
June 23. Hospital buildings, Massillon, O. ..... June 2
June 23. Paving, etc., Lima, O. ..... June 2
June 24. School building, San Diego, Cal. ..... June 2
June 24. Bridge, Cleveland, O. ..... June 2
June 24. Tow-boat service, St. Louis, Mo. ..... June 2
June 24. Brick paving (10,000 sq.yds.), Lima, O. ..... May 19
June 24. Hire of dredge, New Orleans, La. ..... June 9
June 24. Paving, curbing, etc., Ravenna, O. ..... June 9
June 25. Bridge, Alexandria, S. Dak. ..... June 9
June 25. Sewers, Youngstown, O. ..... June 9
June 25. Grading, curbing, etc., Evansville, Ind. ..... June 9
June 25. Railway bridge, Chicago, Ill. ..... May 12
Advertised, Eng. News, May 12 and 19.
June 25. Electric plant, Atlanta, Ga. ..... June 2
June 25. Improving road, Cincinnati, O. ..... June 2
June 25. School building, Cleveland, O. ..... June 2
June 27. Paving, Toledo, O. ..... June 2
June 27. Pipe sewers, South Bend, Ind. ..... June 2
June 27. Sidewalks, grading, etc., South Bend, Ind. ..... June 2
June 27. Iron bridges (4), Monticello, Ind. ..... June 9
June 27. City hall plans, Barre, Vt. ..... June 9
June 27. Street bonds, Bowling Green, O. ..... June 9
June 28. Bridge, Columbus, O. ..... June 9
June 28. School bonds, Mount Vernon, O. ..... June 9
June 28. Laying water mains, New London, Conn. ..... June 9
Advertised, Engineering News, June 9.
June 28. Water bonds, etc., Jackson, Mich. ..... June 9
June 28. Gravel roads (4 miles), Indianapolis, Ind. ..... June 2
June 28. Brick paving (12,000 sq.yds.), Warren, O. ..... June 2
June 29. U. S. building work, Kansas City, Mo. ..... June 2
Advertised, Eng. News, June 2 and 9.
June 29. Paving, Warren, O. ..... June 2
June 29. River work, Chicago, Ill. ..... May 12
Advertised, Eng. News, May 12 and 19.
June 29. Building work Kansas City, Mo. ..... June 9
June 29. Electric light plant, Huron, O. ..... June 9
Advertised, Eng. News, June 9 and 16.
June 30. Hospital building, Fort Snelling, Minn. ..... June 9
June 30. Excavating, etc., Admiralty Head, Wash. ..... June 9
June 30. Steel floor beams, etc., Cheyenne, Wyo. ..... June 9
June 30. Gas apparatus, New York, N. Y. ..... June 9
June 30. School building, Zanesville, O. ..... June 2
July 1. Water power, Madras, India. ..... Oct. 28
July 1. Plans for sewer system, Formby, Eng. ..... Apr. 7
July 1. Plans for sewer system, Cohoes, N. Y. ..... Apr. 28
Advertised, Eng. News, Apr. 28 and May 5.
July 1. Power plant, Sault Ste. Marie, Mich. ..... May 26
Advertised, Eng. News, April 14 to 28.
July 1. Bridges (3), Columbus, O. ..... June 9
July 1. Stone arch culvert, Cleveland, O. ..... June 9
July 1. Street work, St. Louis, Mo. ..... June 9
July 2. School building, Mount Vernon, O. ..... June 9
July 2. Brick paving, Canton, O. ..... June 9
July 2. Water-works, Summit, Miss. ..... May 19
July 5. Steam heating plant, Lancaster, O. ..... June 9
July 5. Dredging in Delaware River, Pa. ..... June 9
Advertised, Eng. News, June 9 to 30.
July 5. Iron bridges (4), Elkton, Md. ..... June 9
July 6. Locktenders' dwellings, Louisville, Ky. ..... June 9
July 7. Brick paving (20,000 sq.yds.), Lima, O. ..... May 19
July 7. Iron or steel bridge, Kingfisher, Okla. Ter. ..... May 19
July 8. Bridge, Roseburg, Ore. ..... June 2
July 8. Bridges (2), Farman, N. Dak. ..... June 9
July 9. School buildings, Dayton, O. ..... June 9
July 10. School building, Rush City, Minn. ..... May 26
July 11. Bridge, Breckenridge, Minn. ..... May 19
July 11. Paving, Toledo, O. ..... June 9
July 13. Steel bridge, Brookings, S. Dak. ..... June 9
July 15. Electric plant, Lamar, Colo. ..... May 5
July 20. Bridges, etc. (11), Chicago, Ill. ..... June 2
Advertised, Engineering News, June 2.
July 20. Embankment, etc., Lemont, Ill. ..... June 2
Advertised, Engineering News, June 2.
July 20. Capitol building plans, Phoenix, Ariz. ..... June 2
July 20. Heat regulating system, Athens, O. ..... June 9
July 25. Water-works, Winnipeg, Man. ..... June 2
Advertised, Eng. News, June 2 to 23.
Aug. 15. Exhibition bldg. plans, Glasgow, Scotland. ..... June 2
Aug. 23. Water pipe, Coolgardie, West Australia, ... June 2
Aug. 31. Custom house, Guayquil, Ecuador. ..... Apr. 21
Aug. 31. Plans for station, etc., Stockholm, Sweden. ..... June 9
Sept. 12. Hospital plans, San Francisco, Cal. ..... Mar. 24
Oct. 24. Markets, etc., Belem, Brazil ..... Apr. 28
No date. Viaduct, Los Angeles, Cal. ..... June 9
" . Bridge, Oakland Mills, Md. ..... June 9
" . Water-works, East Worcester, N. Y. ..... June 9
Advertised, Eng. News, June 9 and 16.

RAILWAYS.

CALUMET WESTERN.—S. A. Liggett, Secy., Pittsburg, Pa., informs us that no work has yet been done on this proposed line from South Chicago to Hegewisch, Ill., a distance of about five miles. Pres., Joseph Wood, 1003 Run Ave.; Ch. Engr., Thomas Rodd, both of Pittsburg.

CAMMAL & BLACK FOREST.—C. B. McCullough, Gen. Mgr., Cammal, Pa., informs us that this company expects to build about 3½ miles of branch track this year. The line at present extends from Cammal to County Line, Pa., a distance of about 22 miles; five curves between these points have been straightened. All work projected will be done by the company.

CHICAGO & NORTHWESTERN.—Paulsen & Larsen, Minneapolis, Minn., who have been awarded the contract for grading the belt line in Manitowoc, Wis., have sublet the work to Herman Trestek, of Manitowoc.

CHILI.—Reports state that the Chilian congress has authorized an expenditure of $220,000 in surveys for railway extension and for new lines. The bills in question specially include the termination of the survey of the longitudinal line between Calera and Pisagua; a survey for a new line between Santiago and Valparaiso; a survey of a line to connect Osborno with Puerto Montt; and such other surveys as the government may decide upon. There remain to be surveyed on the longitudinal line between Calera and Pisagua 600 kilometers (372.6 miles), and on the Osborno and Puerto Montt line 120 kilometers (74.5 miles). It is said that the government has decided to devote $200,000 to the termination of the survey of the longitudinal line.

CHINA.—It is announced that the American China Development Co., represented by A. W. Bash, who is on his way to New York, has received a concession from the Chinese government for the construction of a railway from Hankow, on the lower Yangtsee River, to Canton, a distance of about 900 miles. By the terms of the contract the syndicate must provide $20,000,000 with which to build and equip the road and $25,000,000 more for other lines, concessions for which are being negotiated. The Imperial government guarantees 5% interest. Fifty-year gold bonds will be issued, and after these bonds are all paid the railway will belong solely to the Imperial Chinese railway system. About 200 locomotives, 2,000 cars and other material will be purchased in this country. The syndicate is said to include Thurlow Weed Barnes, Calvin Brice, Chas. H. Coster, Hugh J. Grant, of New York; A. C. Harrison, of Philadelphia; J. W. Foster, of Washington; Henry Wolcott, of Denver.

COLUMBIA SOUTHERN.—D. C. O'Reilly, Gen. Mgr., Wasco, Ore., informs us that the survey has been made and the right of way obtained for the extension of this line from Wasco to Moro, Ore., a distance of 17 miles, and that the work is being carried further south. Grading on this extension was commenced May 9 and about five miles has been completed, the work being done by the company directly. The line at present is in operation between Biggs and Wasco, 10 miles, but it is expected to extend it through Moro, Grass Valley and Antelope to Prineville, 120 miles farther. Pres., E. E. Lytle; Ch. Engr., E. E. Cooper, Wasco, Ore.

CROW'S NEST PASS.—Foley Bros. & Muir, of St. Paul, Minn., are said to have been awarded the contract for the construction of another strip of the Crow's Nest Pass extension of the Canadian Pacific Ry., between Robson and Midway, B. C., a distance of 105 miles. The contract amounts to about $3,000,000. The new branch is in the West Kootenai country and will make a complete line from Lethbridge, Alberta territory, to Midway; the line now ends at Kootenai Lake, which is navigable a large part of the year. From Nelson on the west end of the lake is a completed line to Robson. After the completion of the new branch, another extension from Midway to Penticton and thence to Hope will complete another grand transcontinental route, considerably shorter and more valuable than the present main line route. M. J. Haney, Mgr. of Construction, McLeod, Alberta, N. W. T.

GEORGIA.—J. L. Cowan, of Opelika, Ala., is making surveys for the proposed line of railway from Riverview, Ga., to Opelika, Ala. At Opelika connection will be made with Columbus, Ga., over the Central of Georgia Ry. The new line will virtually be an extension of the Chattahoochee Valley R. R., now operating between West Point and Riverview, 10 miles. J. J. Hagedorn & Co., West Point, Ga., are interested.

GRANT CITY & SOUTHERN.—This company was incorporated in Missouri, June 4, with a capital stock of $500,000, to construct a 20-mile line of railway from Grant City, Mo., to a point about two miles west from Albany, in Gentry county, connecting the Leon, Mount Ayr & Southwestern with the St. Joseph & Des Moines Ry., both Chicago, Burlington & Quincy lines. The incorporators are: O. M. Spencer, S. E. Crance, C. M. Carter and others.

HIGHLAND & ST. JOSEPH.—This company was incorporated in Kansas, May 29, with a capital stock of $25,000. It is proposed to build and operate a line from Highland, Doniphan county, Kan., to a point near Severance on the St. Joseph & Grand Island R. R., a distance of 7½ miles. The directors are: J. E. Marcell, A. J. Thomas, W. M. Boone, Norman Case, Z. L. Gilmore, G. W. Overlander, James L. Allen and J. H. Bingham, all of Highland.

LEBANON SPRINGS.—Press reports state that this railway has been purchased by William Forster, of New York. The total length of the line, in New York and Vermont, is 58 miles, but at present only a few miles in Rensselaer county are in operation. Much of the road is in bad condition, and it is said that about $200,000 will be required to rebuild and equip it properly. Elnathan Sweet, Albany, N. Y., was formerly the receiver for the company.

LIVE OAK & GULF.—Chas. W. White, Gen. Mgr., Citra, Fla., informs us that three miles of 40-lb. rail will be replaced by a 60-lb. rail on this railway now in operation between Live Oak and Peek, Fla., 20 miles.

NEW MEXICO & WESTERN.—G. M. Latimer, Pres., East Las Vegas, N. Mex., informs us that this company did not award contracts in May, as expected, for the construction of this proposed railway from Maxwell City to Taos, 100 miles. Surveys have been made and the necessary capital secured, but it was decided to wait a short time on account of the war.

NORFOLK & SOUTHERN.—M. K. King, Gen. Mgr., Norfolk, Va., informs us that this company is now reducing the curve and shortening the track on its line at Elizabeth City, N. C. A 36-mile branch line has been surveyed in Currituck county, N. C., from Snowden to Point Harbor, but construction work has not yet begun.

PANAMA.—G. R. Tuska, Ch. Engr., 29 Broadway, New York, informs us that no bids will be asked for the construction of the proposed branch of this railway from Panama to La Boca, in Colombia. A new freight yard and terminals will be built at La Boca, also a station, engine shed, etc.

PEORIA, DECATUR & EVANSVILLE.—E. O. Hopkins, Receiver, Evansville, Ind., informs us that a draw-span bridge is now being erected over the Wabash River, near Grayville, Ill. An interlocking plant will be established at the crossing with the Illinois Central Ry., at Mattoon, Ill., for which the contract will be made by the Illinois Central Ry. Co.

PORTLAND & RUMFORD FALLS.—W. Pettengill, Vice-Pres., Rumford Falls, Me., informs us that two miles of new track are to be laid, 1¼ miles of alinement to be changed and new terminals to be built at Livermore Falls. Three new stations will also be built. Contracts have been awarded.

ST. FRANCOIS VALLEY.—This company has been incorporated in Missouri, with a capital stock of $100,000, to construct a standard gage line of railway, ten miles in length, from Campbell, Mo. The incorporators are Louis B. Houck, Leo Doyle, R. B. Andrews and others; principal place of business, Cape Girardeau, Mo.

SKAGUAY & LAKE BENNETT.—Press reports state that contracts have recently been awarded by E. B. Hussey, at Seattle, Wash., for the material required in the construction of this proposed railway over White Pass. The Illinois Steel Co., of Chicago, will furnish a 56-lb. rail, and G. M. Forbes, of Trinidad, Colo., will supply about 3,000,000 ft. of lumber. The gage of the line will be 3 ft. Close Bros., of Chicago, are said to be the financiers of the project.

WASHINGTON COUNTY.—Bids are asked by Washington county until June 13 for the purchase of $200,000 in bonds to be issued to aid in the construction of this railway. Austin Harris, County Clk., Machias, Me.

WESTERN AMERICAN.—T. B. Corey, Supt., Seattle, Wash., informs us that the survey has been made and the capital secured for the construction of a 19-mile line of railway for this company from Carbonado to Mount Rainier, Wash. Contracts were to be awarded in the first part of June. Pres., H. W. McMill, Seattle.

STREET AND ELECTRIC RAILWAYS.

HYDE PARK, MASS.—It is reported that the selectmen of this town have voted to grant a franchise to the Stoughton, Canton & Boston Electric St. Ry. Co. to operate a line from the Norfolk Suburban street railway line at Readville, through Milton St., to Paul's Bridge, at the Milton line.

ALBANY, N. Y.—We are informed that the Albany Construction Co., 93 State St., Albany, N. Y., was awarded the contract June 2 for the construction of the proposed Albany, Helderberg & Schoharie Electric Ry., from Albany to Schoharie, via New Scotland, Clarksville, Thompson's Lake, East Berne, Berne and Gallupville, a distance of 42 miles. Capital for construction has been secured, and it was expected to begin the survey this week. The Albany Construction Co. was incorporated in New York May 25, with a capital stock of $5,000, and its officers are, Richard W. Schermerhorn, Brooklyn, N. Y., president; Chas. B. Bibber, Boston, Mass., treasurer; J. S. Frost, Albany, secretary. The officers of the railway company are, Henry W. Burgett, president; Chas. B. Bibber, treasurer, both of Boston, Mass.

SYRACUSE, N. Y.—It is announced that the directors of the Syracuse Rapid Transit Co. have decided to extend the Burnet Ave. line with double tracks to the city line, and to lay a single track on Salina St. to the southern city line to Brighton Ave.; the latter extension to be made at once. It is also proposed to lease the power plant and other property of the Eastwood & East Syracuse Ry. Co., and to operate it in connection with the present line. J. H. Moffitt, Gen. Supt.

NIAGARA FALLS, N. Y.—Reports state that the Niagara Falls, Park & River Ry. Co., operating between Chippewa and Queenstown, Canada, a distance of 14 miles, has been granted the exclusive right to lay tracks upon the bridge of the Niagara Falls & Clifton Suspension Bridge Co.

PLAINFIELD, N. J.—It is reported that Frank J. Hubbard, of Plainfield, has completed the survey for the proposed trolley line to be built between this city and Elizabeth in connection with a boulevard about 100 ft. wide. The construction of such a boulevard and the sale of the franchise for the electric railway is now within the power of the Union county board of freeholders, as the Squire bill has become law.

PLAINFIELD, N. J.—Reports state that the Plainfield St. Ry. Co. has obtained a sufficient number of consents of the property owners on East 2d St. for the construction of a street railway thereon. The company has applied to the council for a franchise to extend its lines so as to connect with the proposed electric railway to be built by the Elizabeth & Westfield St. Ry. Co. through Scotch Plains. Pres., T. N. Nevins.

MEADVILLE, PA.—It is expected that the electric railway company operating a line through this city since April 15 will construct an extension northward to Cambridge Springs, a distance of 15 miles, and to Edinboro, 6 miles further. A power house will probably be erected at Cambridge Springs.

HOMESTEAD, PA.—Erbeck Bros., of Homestead, contractors for the construction of the portion of the line projected by the Monongahela Traction Co. between Homestead and Duquesne, inform us that the survey has been made and the right of way obtained for the proposed railway, 3½ miles of which will be double and the remaining 7 miles single track. No contracts will be sublet. The Pittsburg Bridge Co. will construct a viaduct on the route. Pres., W. L. Meilon, of Pittsburg; Ch. Engrs., Wilkens & Dawson, Pittsburg.

BALTIMORE, MD.—The Baltimore county commissioners have granted a permit to the Maryland Electric Co. to lay single or double railway tracks on the Philadelphia Road, from Loney's Lane to Joppa Road. The Baltimore & Gunpowder Ry. Co., of which James Young is president, also has a franchise to construct a railway on the Philadelphia Road.

MYERSVILLE, MD.—Arthur L. Bosley, of Frederick, Md., is said to have been awarded the contract for the electrical construction and equipment of the Myers & Catoctin Electric Ry., to be about 5¼ miles in length. The grading, bridging and track-laying will be done by Douglass Bros., of Middletown, Md., formerly of Millerstown, Pa. Pres., C. F. Flook, Frederick, Md.

WASHINGTON, D. C.—The Brightwood Ry. Co. is considering the advisability of extending its line from 6th and Umatilla Sts., Yakoma Park, northerly along 6th St. and Blair Road to the District line.

NEWPORT NEWS, VA.—Surveys are now being made for the proposed line of the Newport News & Old Point Ry. & Electric Co., from Newport News to Old Point Comfort, via Hampton and Phoebus, 10 miles. Materials are now being purchased, and bids are being received for 30,000 well-seasoned crossties.

STAUNTON, VA.—E. L. Edmonson, Proprietor Seawright Magnesium Lithia Springs Co., of Staunton, informs us that the Seawright Sanctorium & Hotel Co. is being organized to develop the Seawright Springs property, 11 miles from this city, and that it is proposed, among other improvements, to construct a connecting electric railway. A power plant would probably be built at Middle River.

VICKSBURG, MISS.—It is reported that the Vicksburg Power & Mfg. Co. will begin the construction of eight miles of street railway in this city about June 15. Secy., M. J. Mulvihill, of Vicksburg.

TOLEDO, O.—We are informed that Hendrick Leach, Monroe, Mich., has the contract for the track work and grading on the proposed Toledo & Monroe Beach R. R. Work was commenced on the line April 20, one-third of the grading has been finished, and it is expected to begin track-laying on June 10. The length of the road will be about 23 miles. Mr. Leach also built the Cleveland & Lorain Electric R. R., which was completed in last October.

ELKHART, IND.—J. J. Burns, 1620 Marquette Bldg., Chicago, Ill., informs us that he has purhcased the franchise and the right of way of the proposed electric railway between Elkhart and Goshen. Two miles of the line have been built and also the terminals, and rails are on hand for about two miles more of the line, causing about half of the work to be completed. No bonds have yet been sold.

INDIANAPOLIS, IND.—Press reports state that the Westinghouse Electric & Mfg. Co., of Pittsburg, has made a contract with the Citizens' St. R. R. Co. to furnish it with a large addition to the power plant.

PLYMOUTH, MICH.—A. A. Tafft, Plymouth, informs us that the township and village of Plymouth have granted a franchise to the Detroit, Plymouth & Northville Ry. Co., to construct an electric railway from Wayne to Northville, via Plymouth, 15 miles. Vice-Pres., J. A. Russell, 615 Union Trust Bldg., Detroit, Mich.

BLOOMINGTON, ILL.—The property of the Bloomington City Ry. Co., including 13 miles of street railway, was bought by A. E. De Mange, May 31, at $202,000. It is said that the road is in poor condition and that about $50,000 will have to be spent on reconstruction.

CHICAGO, ILL.—Judge Showalter has granted the receiver of the Metropolitan West Side Elevated R. R. Co. permission to spend $146,210 on the enlargement of its power house, and it is said that contracts for the work will be awarded immediately. The power house is at Center Ave. and West Congress St. It will be extended to the west line of Loomis St., making an additional 164 ft., the same width as the original building. It is proposed to add engines and generators of 4,000-HP., and in the near future an extra 2,000-HP.

COUNCIL BLUFFS, IA.—The contract for the erection of a new power house on 2d Ave. for the Omaha & Council Bluffs Ry. & Bridge Co. is said to have been let to Wickham Bros. Work is expected to commence at once.

KANSAS CITY, MO.—The Metropolitan St. Ry. Co. is stated to have awarded the contract for the overhead wiring of the electric line, which is to replace the cable system on 5th St., to the North American St. Ry. Construction Co., of Chicago. Iron trolley poles will be used along the line, and a copper feed wire from the Riverview power house will meet the road at West 9th St. The work will begin July 1 and is to be finished September 1. W. H. Holmes, Gen. Mgr.

ST. LOUIS, MO.—R. Lehmann, Secy. and Treas. St. Louis & Suburban Ry. Co., 216 Wainwright Bldg., informs us that the council has granted franchises to this company for the construction of several extensions to be operated by electricity. W. Bartlett, Ch. Engr.

OTTAWA, ONT.—The railway committee of the privy council has granted a charter to the North Shore Electric Ry. Co., which proposes to build a line from Three Rivers along the north shore of the St. Lawrence River; and to the Montreal & Southern Counties Ry. Co. to extend its line to the county of Beauharnois, Chateauguay, Huntington and Napierville. A. J. Corriveau is the promotor of both projects.

MONTREAL, QUE.—It is reported that the Montreal St. Ry. Co. will lay a large amount of new track during the coming summer, including a double-track on St. James St.

ELECTRIC LIGHT AND POWER.

BUFFALO, N. Y.—The Cataract Power & Conduit Co. has asked for permission to extend its conduits in Niagara St., from Brace St. to the city line. The conduit will be laid in a trench 50 ins. deep and 24 ins. wide. About 350 ft. will be laid each day. Mgr., Geo. Urban.

BUFFALO, N. Y.—Newcomb Carlton, 109 White Bldg., Mech. Engr., will receive bids for an electric lighting and power plant for the C. G. Curtiss estate malting plant.

DUNDEE, N. Y.—The question of issuing bonds for the municipal ownership of the electric light plant is reported as being considered.

ELMIRA, N. Y.—Local papers state that the committee will recommend the municipal ownership of the electric light plant; estimated cost, $50,000. The present contract with the company expires in November. Aldermen Gray, Daly and Causer compose the committee.

LYNBROOK, N. Y.—The town board is reported to have declared illegal the contract for lighting the Hempstead farms and marshes recently let to John N. Williamson.

NEW YORK, N. Y.—It is stated that the American Air Power Co., 160 Broadway, is to make extensive alterations to its brick and stone power house in 23d St., west of 13th Ave., from plans by A. V. Porter, 621 Broadway.

BELLEVILLE, N. J.—James Hardman, Jr., Belleville, has submitted the lowest bid for lighting this place, at $13.80 a light a year for three years, and at $13 a light a year for five years. The plant can be built in about 60 days.

SEA ISLE CITY, N. J.—Bids are asked until June 17 for lighting the city, according to reports. Mayor, A. H. Sickler, 516 Union St., Philadelphia.

VERONA, N. J.—This place voted June 7 on the question of making an electric lighting contract.

DU BOIS, PA.—It is stated that the plant and franchise of the Du Bois Electric Light, Power & Heat Co. were sold May 28 at the trustee's sale to W. C. Pentz for $5,000.

NEW WINDSOR, MD.—L. H. Dielman, Secy. New Windsor Electric Light & Power Co., writes us that all contracts have been let for extending the plants.

WASHINGTON, D. C.—The United States Electric Lighting Co. was the lowest bidder June 1 for lighting the public parks under control of Colonel Bingham, U. S. Engr., U. S. A., at $50 a year for each arc lamp in all parks, except the Executive Mansion grounds, where the rate was $25, and for the monument grounds, where the rate was $85.

MORGANTON, N. C.—Bids are asked until Aug. 1 for the purchase of the plant and franchises of the Morganton Electric Light & Power Co. Receiver, R. R. Laxton.

AUGUSTA, GA.—B. R. Mitchell, Supt. Construction, writes us that nothing has yet been done in regard to the proposed plant.

MACON, GA.—The electric light plant of the Macon Gas Light & Water Co. was bought May 31 by the Macon & Indian Spring Ry. Co. for $40,000, the upset price fixed by the court. Local papers state that new machinery will be put in.

BIRMINGHAM, ALA.—J. J. Altman, Chn. Com., writes us that the city contemplates the ownership of its own light plant. To this end steps will be taken next fall.

UNION SPRINGS, ALA.—It is stated that the council is making arrangements to ask for bids for the purchase of $20,000 of electric light plant bonds.

BROOKHAVEN, MISS.—We are informed that the demand is so great for electric lights from the new plant that the board is considering the question of buying another dynamo and engine. Engrs., Sanders & Porter, Louisville.

McCOMB, MISS.—We are informed that it has been decided not to call for bids for constructing the water-works until a vote can be taken on the question of issuing $20,000 in additional bonds for lights and sewers. Engrs., Sanders & Porter, Columbia Bldg., Louisville, Ky.; Cy. Engr., Granberry Jackson, Mount Pleasant, Tenn.

ST. FRANCISVILLE, LA.—Chas. Weydert is reported as interested in the proposed plant for this place.

HURON, O.—Bids are asked until June 29 for furnishing and installing an electric light plant, as described in our advertising columns. Engr., B. J. Ashley, Old Colony Bldg., Chicago, Ill.; Clk., T. W. Derby; Mayor, C. M. Ray.

LEBANON, O.—An election was held June 6 to vote on the question of either purchasing the plant of the Lebanon Light, Fuel & Power Co. for $20,000 or of leasing it for $3,500 a year.

XENIA, O.—It is reported that a new electric light company is being organized with a capital stock of $10,000. Harry L. Canfield, Xenia, is reported as interested.

CASS CITY, MICH.—This place has voted to issue $18,000 in bonds for a plant and water-works.

WHITEHALL, MICH.—Jos. L. Steffer, Village Pres., writes us that the contract for building a plant has been let to Emalan & Miller, Grand Haven, Mich.

BUNKER HILL, ILL.—A. E. Mercer, Alderman, writes us that the city has voted to put in a plant, but it has not as yet had estimates made. It will be ready to let the contract soon. The plant will have a capacity for 30 arc lights of 2,000 c. p. and 750 incandescent lights of 16 c. p.

HARVARD, ILL.—F. L. Smith, Gen. Mgr., informs us that the plant owned by the F. C. Smith Electric Co. was partially destroyed by fire recently. There will be required a new brick building and switchboard; estimated cost, $1,000. The engines, boilers, etc., were not injured.

ODELL, ILL.—Bids are asked until June 20 for the purchase of a franchise for electric lighting and for pumping water. F. W. Francis, Village Clk.

BOSCOBEL, WIS.—W. T. Hurd, Mayor, writes us that the city proposes to put in a plant, but no definite arrangements have yet been made.

ELKHORN, WIS.—John S. Allen, Elec. Engr., writes us that the city voted at the last election to issue $10,000 in bonds for a plant. It will be operated in connection with the water-works. There will be an alternating current commercial system and an open arc 2,000-c. p. street lighting system. The plant will be built by the city engineer and machinery bought by the light committee of the council under the direction of the engineer. D. W. Stahford, Mayor.

MILWAUKEE, WIS.—The Chas. B. Kruse Heating Co., Milwaukee, submitted the lowest bid June 2 for furnishing and installing a plant for the new library and museum building at $14,350.

SUPERIOR, WIS.—An understanding has been reached between the Superior Water, Light & Power Co. and the city whereby the electric lighting is to be done for $11,400 a year, a saving of $21,000 a year. In this event the city will not put in its own lighting plant.

ALGONA, IA.—Bids were received until June 7 for furnishing two 100-HP. Corliss boilers, a 150-HP. Corliss engine, etc., and for constructing a municipal plant. We are informed that the plant will have a capacity for 12 arc and 85 incandescent lights; estimated cost, $12,000. Supt., Chas. Foster.

SIOUX RAPIDS, IA.—The Sioux Rapids Electric Light & Power Co.'s plant is reported to have been destroyed by fire June 2, causing a loss of $25,000. Supt. and Treas., J. E. Henriques.

TWO HARBORS, MINN.—J. L. Lunz writes us that plans, etc., for the proposed plant are about completed.

WYNNE, ARK.—Bids were received June 1 for propositions for furnishing this place with a plant and a water supply. We are informed that the plant will have a capacity for 10 arc and 300 incandescent lights; population, 2,000. Geo. W. Eldridge, Cy. Recdr.

KINGFISHER, OKLA.—Burns & McDonnell, Engrs., of Kansas City, Mo., are reported to have been granted a 25-year light and water franchise. Alderman Mead and J. V. Admire are on the committee.

NEW CASTLE, WYO.—The council has granted a six-year franchise to C. A. Peterson for an electric light plant and has made a contract with him for lighting the city for that length of time. Mr. Peterson will commence the work of erecting the plant at once, according to reports.

LOS ANGELES, CAL.—It is proposed to call an election to vote on the question of issuing $7,500 in bonds for a plant. Bids for constructing a more extensive plant, it is reported, will be received in a short time. When the contract is advertised for street lighting it will probably provide: First—For supplying the city with light under present conditions, but for 279 additional lamps at specified locations. Second—It will call for bids for construction of a complete distributing system for lighting the city with 737 lights. Third—It will call for bids for necessary current to operate the system for one year; for its maintenance for a year.

SEBASTOPOL, CAL.—G. W. Swain, Elec. Engr., San Jose, Cal., is reported as arranging to build a plant for this place.

MEXICO, MEX.—Press reports state as follows: Under the direction of Gregorio E. Gonzalez, Mexican and American capital, to the extent of $20,000,000, has been interested, and more than 100 different concessions have been obtained from the government for the utilization of water power in the immediate vicinity of this city. The plans of the company, whose capital is to be divided equally between Mexican and American financiers, include the building of an industrial village, and the establishment of all sorts of manufacturing plants, prominent among which one for making safes is mentioned. Mr. Gonzalez has made several trips to the United States in the interest of this enterprise, and he recently returned to Mexico to complete the details, leaving the concessions mentioned in the hands of three American capitalists.

NEW COMPANIES.—A. B. Swett Electric Light & Power Co., Ridgeway and Shelby, N. Y.; $50,000; Albert B. Swett, Sebago Transmission Co., Portland, Me.; $50,000; Chas. F. Libby, Portland, Me.; Geo. W. Brown, Deering; Harry L. Jones, Medford, Mass.

Lafayette-Louisville Electric Co., Lafayette, Colo.; $20,000; H. E. Becker, J. Carreuthers, James Simpson.

Gwynn's Falls Power Co., Baltimore, Md.; $100,000; Joel C. Dunbracco, Edmund M. Hoffman, E. Scott Merryman, Philip H. Hoffman, and John G. Wescott.

Vicksburg Electric Light & Power Co., Chicago, Ill.; $100,000; Percival Steele, David R. Lamonte, C. D. Donovan.

Paducah Railway & Electric Light Co., Paducah, Ky.; $200,000; George C. Thompson, T. J. Flournoy, George C. Wallace, W. F. Paxton.

Sheffield Electric Light Co., Sheffield, Ill.; $9,000; T. Sprague, B. F. Dewey, W. E. Jones.

Citizens' Electric Light Co., Xenia, O.; J. W. Newcomer, W. S. Fawcett, W. R. Baker, A. J. Chatfield, J. B. Lewis, Harry L. Canfield.

People's Light & Heat Co., Hot Springs, Ark.; $25,000, with $20,000 paid in; L. D. Cooper, Pres.; W. H. Perry, J. B. Wood, S. H. Stitt, John G. Lonsdale, C. E. Harrell.

Howard Electric Co., Chicago, Ill.; $25,000; to manufacture electric appliances; Robert Greer, William Greer, James H. Parker.

Deering Electric Light Co., Westbrook, Deering, Gorham, Cape Elizabeth and South Portland, Me.; $25,000; George W. Brown, Deering; Frank W. Stockman, Elmer E. Fernald, Wm. L. Watson, Levi Turner, Portland.

BRIDGES.

BOSTON, MASS.—A contract has been awarded to Wm. J. Lawlor at $10,206 for widening the Federal bridge, according to reports. Wm. Jackson, Cy. Engr.

WORCESTER, MASS.—F. A. McClure, Cv. Engr., is preparing plans for the construction of a single-span stone arch bridge, to cost about $30,000.

BUFFALO, N. Y.—Bids are asked until June 14 for constructing the piers, abutments and approaches to the Hamburg St. viaduct. Frank S. C. Bardol, Ch. Engr., 436 Ellicott Square.

HERKIMER, N. Y.—The town board has directed the commissioner of highways to prepare estimates for the construction of a bridge over West Canada Creek, and will afterwards call an election. Norman Folts may be addressed.

HERMAN, PA.—The viewers appointed by the commissioners of Northumberland and Snyder counties decided by a vote of four to two in favor of constructing a bridge across the Susquehanna River from this place to Port Trevorton.

POTTSVILLE, PA.—It is reported that a petition will be sent to the Philadelphia & Reading Coal & Iron Co. for the construction of a foot bridge at the upper Tumbling Run dam.

ELKTON, MD.—Bids are asked by the county commissioners until July 5 for constructing four iron bridges.

OAKLAND MILLS, MD.—Bids are asked by the board of examiners for constructing a bridge across the Patapsco River, according to reports.

OREGON, MD.—C. H. Callings informs us that no action has been taken by the county commissioners in regard to a petition for a bridge.

THURMOND, W. VA.—The Thurmond Bridge Co., Thurmond, W. Va., has been incorporated by Dr. W. H. Meyers, Meyersdale, Pa.; H. K. Black, Charleston; J. P. Chapman, Montgomery; Leo Shaffer, Sewell, and S. G. Walker, Thurmond, with a capital stock of $25,000, with $50 paid in, to construct a bridge across the New River, near this place.

LOUISVILLE, KY.—The county commissioners have recommended the construction of an iron bridge over Ponds Creek.

CLEVELAND, O.—Bids are asked until July 1 for constructing a 40-ft. stone arch culvert, retaining wall, etc., on the Warner Road over Mill Creek. Geo. R. Warden, Dir. Pub. Wks.

COLLINWOOD, O.—Reports state that a contract has been awarded to the King Bridge Co., Cleveland, at $50,000, for constructing the superstructure of a bridge 1,200 ft. long over the Lake Shore & Michigan Southern Ry. Co.'s tracks.

HAMILTON, O.—A new bridge will be constructed by the county commissioners over the Miami River on Wood St., to be 400 ft. long and 30 ft. wide.

LEBANON, O.—Bids are asked until June 20 for building the abutments for a bridge over Turtle Creek, in Union township. I. N. Walker, County Audr.

COLUMBUS, O.—Bids are asked until June 28, instead of June 14, for constructing a 259 ft. truss bridge over Big Walnut Creek; also until July 1 for constructing a bridge over Alum Creek, on East Main St., and for two other county bridges in Harrisburg and in Perry township. W. H. Halliday, County Audr.

DELAWARE, O.—Bids are asked until June 17 for constructing the substructure and steel superstructure of a 126-ft. bridge. E. S. Mendenhall, County Surv.——Reports state that other bridges will be constructed this year. J. O. Taggart, Cy. Engr.

DELPHOS, O.—Bids are asked until June 14 for constructing a stone arch on East Second St., according to reports. Philip Walther, County Audr.

HAMILTON, O.—S. A. Dillon, County Surv., has been instructed to prepare plans for the Columbian bridge.

SPRINGFIELD, O.—The park commissioners held a meeting June 7 to consider the plans of D. F. Snyder, Cy. Engr., for the approaches to the Snyder Memorial bridge.

MONTICELLO, IND.—Bids are asked until June 27 for the construction of four iron bridges, according to reports. John G. Farmer, County Clk.; Geo. H. Roberts, County Engr.

SOUTH BEND, IND.—A petition has been presented to the county commissioners by about 80% of the taxpayers, for the removal of the iron bridge at Jefferson St., to Sample St., and for the construction of a stone bridge in its place.

NEWAYGO, MICH.—Bids are asked until June 17 for furnishing and constructing a bridge, as described in our advertising columns. O. W. Haney, Clk. Township Bd. of Brooks, Newaygo, Mich.

PAXTON, ILL.—Bids are asked until June 15 for the construction of an 85-ft. × 14-ft. highway bridge on stone foundation. V. E. Johnson, Town Clk.

WASECA, MINN.—Bids are asked until June 10 for constructing six steel bridges. A. J. Lohren, County Audr.

ELKADER, IA.—Bids are asked until June 14 for the construction and repair of county bridges, according to reports. Wm. Monlux, Chn. County Com.

GUTHRIE CENTER, IA.—Bids are asked until June 14 for constructing two stone arch bridges, 6 × 40 ft. and 8 × 40 ft., according to reports. H. S. Marshall, County Audr.

MARION, IA.—Bids are asked until June 15 for constructing three iron bridges and 19 pile bridges; also for grading and macadamizing. L. Camp, County Audr.

ALEXANDRIA, S. DAK.—Bids are asked until June 25 for constructing a stone arch or wooden bridge, 64 ft. × 16 ft., over Wolf Creek, according to reports. E. I. Gregory, County Audr.

BROOKINGS, S. DAK.—Bids are asked until July 13 for constructing a 60-ft. span steel combination bridge, across the Sioux River, in Medary township, according to reports.

FORMAN, N. DAK.—Bids are asked until July 8 for furnishing the plans and constructing two bridges, 80 ft. and 40 ft. long, over Wild Rice Creek. A. N. Carlblom County Audr.

OREGON, MO.—Reports state that seven county bridges will be constructed. C. G. Landon, County Engr.

STOCKTON, MO.—It is reported that the question of constructing two bridges, of 112 ft. and 150 ft. long, is being considered. John C. Truet, County Judge, Eldorado Springs, Mo.

BROWNSVILLE, TEX.—Bids are asked until June 13 for constructing a 100-ft. wooden bridge and a 171-ft. extension to the Negros bridge. Joseph Webb, County Clk.

LOS ANGELES, CAL.—Bids are asked by the Los Angeles Traction Co. for constructing a 1,600-ft. viaduct across the Santa Fe River. W. S. Hook, Mgr.

BUILDINGS.

BARRE, VT.—Plans and specifications are asked until June 27 for the construction of a new city hall building. Mayor, John W. Gordon; Cy. Engr., C. S. Currier; Arch., Geo. G. Adams, Lawrence, Mass.

BINGHAMTON, N. Y.—Bids are asked until June 16 for the erection and completion of a building for attendants for the Binghamton State Hospital. John B. Stanbrough, Pres. Bd. Mgrs., Binghamton; I. G. Perry, Arch., Albany, N. Y.

BROOKLYN, N. Y.—Horgan & Slattery, 1 Madison Ave., New York, are said to be preparing plans for new plumbing, painting and other alterations to be made to the Municipal Building.

NEW YORK, N. Y.—Bids are asked by the board of education, at 585 Broadway, until June 13, for making alterations, repairs, etc., at public schools Nos. 6, 14, 18, 27, 106, 124, 125 and 130; also for improving the sanitary condition of public schools Nos. 16, 29 and 55.——Plans have been filed by Frederick G. Bourne, Dakota Apartment House, for a 14-story limestone office building at 85 to 89 Liberty St., to cost $450,000. Arch., Ernest Flagg, 54 Broad St.; by the University Settlement Society, 26 Delancey St., for a 5-story brick kindergarten and gymnasium building at Eldridge and Stanton Sts., to cost $85,000. Archs., Howells & Stokes, 47 Cedar St.

NEW YORK, N. Y.—Bids are asked by the department of public charities, 66 3d Ave., until June 20 for materials and work required for furnishing and erecting a refrigerator at the almshouse on Blackwell's Island; two bonds required of $500 each.——Milliken Bros. are said to have received the contract for the iron work; George Brown for the stone work; George Vassar's Son & Co. for the mason work for the new warehouse to be erected at Hudson, Vandam and Spring Sts., for the Trinity Corporation. Arch., Chas. C. Haight, 111 Broadway.

NYACK, N. Y.—The Prospect House was burned June 2, causing a reported loss on the building of $60,000.

SYRACUSE, N. Y.—Bids are asked until June 13 for constructing the proposed additions to the Franklin School Building. P. D. Cooney, Clk. Bd. Education; Chas. E. Colton, Arch., Kirk Bldg.

UTICA, N. Y.—Bids are asked by the school commissioners until June 13 for reconstruction of the Free Academy Building at Kemble and Elm Sts. Clk., J. Phil. Bannigan, Public Library Bldg.; Arch., Jacob Agne, Jr., Arcade Bldg.

CAMDEN, N. J.—Bids are asked until June 15 for the purchase of $85,000 of bonds, issued in order to purchase land and erect thereon a manual training and high school building. George G. Felton, Cy. Treas.

MONTCLAIR, N. J.—John S. Carlson is said to have been awarded the general contract for constructing the new building for the Y. M. C. A. on Bloomfield Ave., at $47,200. Archs., Van Vleck & Goldsmith, 156 5th Ave.

WEST CHESTER, PA.—John A. Burger & Son, Lancaster, Pa., have been awarded the contract for erecting an insane asylum in this city, at about $70,000.

WASHINGTON, D. C.—Bids are asked by the U. S. Life Saving Service, Washington, D. C., until June 13, for the construction of life-saving stations at Mantoloking, Island Beach, Ship Bottom, Little Egg, Brigantine, Pecks Beach, north side of Corsons Inlet, and Holly Beach, on the coast of New Jersey. Horace L. Piper, Acting Gen. Supt.——E. Norris, Architect, has prepared plans for a large 5-story addition to the Hotel Grattan, at Connecticut Ave. and De Sales St. F. W. Andrews, Owner; Chas. A. Langley, Builder.——Plans have been prepared by Paul J. Pelz for a large store building at 7th and K Sts., N. W. William Hahn & Co. are the owners.

ANNAPOLIS, MD.—Congress has appropriated $1,000,000 for the construction of new buildings for the Naval Academy at this place. Ernest Flagg, 15 Broad St., New York, is reported as preparing plans for the new structures, the first to be built being the power house, the armory and the boat house.

BALTIMORE, MD.—At the annual convention of the Protestant Episcopal Church, of Maryland, it was decided to erect a new library building for the diocese at 1104 to 1108 Madison Ave., to cost about $50,000.

HERNDON, ALA.—Hueston & Riches, Mobile, Ala., were awarded the contract May 31 for the construction of an administration building, barracks, officers' quarters, a wharf about 650 ft. long and about two miles of roadway at Fort Morgan, to cost about $40,000.

LOUISVILLE, KY.—Bids are asked until July 6 for constructing four sets of lock-tenders' dwellings at sites of Locks Nos. 7 and 8, Kentucky River. Capt. J. G. Warren, U. S. Engrs.

ATHENS, O.—Bids are asked by the trustees of the Athens State Hospital Building, until July 20, for the complete installation of an automatic heating regulating system for the plant now being erected. Supt., E. H. Rorick, Athens.

DAYTON, O.—Bids are asked by the board of education until July 9 for furnishing plans and specifications for one 16-room and one 12-room school building. Clk., Wm. G. Haeussler.

LANCASTER, O.—Bids are asked until July 5 for erecting a complete steam heating plant at the Boys' Industrial School. Secy., C. D. Hilles.

MOUNT VERNON, O.—Bids are asked until June 28 for the purchase of $25,000 of 20-year school bonds; also until July 2 for the construction of the new Central High School Building in this city. R. W. Colville, Clk. Bd. of Education; Geo. F. Hammond, Arch., 166 Euclid Ave., Cleveland, O.——Bids are asked by the commissioners of Knox county, June 20, for furnishing the county clerk's office with steel fixtures and furnishings. W. A. Wander, County Audr.

DANVILLE, ILL.—Bids are asked by the National Home for Disabled Volunteer Soldiers, of Hartford, Conn., at Danville, until June 18 for constructing a passenger elevator in the administration building of the hospital, and for furnishing and installing boilers, heaters, plumbing and electric light apparatuses in the boiler house building; also until June 30 for erecting barrack buildings. W. B. Franklin, Pres. Bd. Mgrs.

MANITOWOC, WIS.—We are informed that Matthews & Keith, of Manitowoc, have been awarded the contract for constructing a new elevator in this city, for the Northern Grain Co., and also for a new dock which will require the driving of about 37,000 spiles. The contract for constructing the dock was made with the Advancement Association, and the material will be furnished at the rate of $2.75 a foot.

MILWAUKEE, WIS.—Bids are asked by the park commissioners until June 21 for constructing a conservatory at Mitchell Park, estimated to cost $25,000. This is a readvertisement for bids, those last received being about $12,000 above the appropriation.

FORT SNELLING, MINN.—Bids are asked until June 30 for the construction, plumbing, gas fitting and hot water heating of one hospital building at this place. E. S. Dudley, Acting Chn. Q. M., St. Paul, Minn.

SHERBURNE, MINN.—Bids are asked until June 21 for constructing a 6-room brick school building. Geo. F. Kiehl, Secy. School Bd.; F. W. Kinney, Arch.

LINCOLN, NEB.—The Worthington Academy, an Episcopal college, was destroyed by fire June 2, causing a reported loss of $65,000; insurance, $35,000.

ANACONDA, MONT.—We are informed that bids are asked until June 14 for the erection of a 2-story court house building and a 2-story jail building for Deer Lodge county, to cost about $95,000. A. M. Walker, Chn. County Comrs.; Bell & Kent, Archs., Merchants' Bank Bldg., Helena, Mont.

CHEYENNE, WYO.—Bids are asked by the supervising architect until June 30 for the basement and area walls, first floor steel beams, etc., for the U. S. Building in this city.

LAWRENCE, KAN.—Bids are asked until June 22 for constructing two lavatory buildings, etc., for the U. S. Indian school service, at Haskell Institute. Supt., H. B. Peirs.

KANSAS CITY, MO.—Bids are asked by the supervising architect, Washington, D. C., until June 29 for the rear wall, steel and iron work, skylights, brick and terra cotta floor arches, etc., for the U. S Building in this city

ORANGE, CAL.—Bids are asked until June 14 for constructing an addition to the Orange school house. Arch., C. B. Bradshaw.

BENJAMIN, UTAH.—Bids are asked until June 25 for constructing a new school building at this place. Trustee, Niels Thompson.

MONTREAL, QUE.—The Western Abattoir and a number of slaughter houses at St. Henry were burned June 1, causing a loss of about $175,000; insurance, $60,000.

STOCKHOLM, SWEDEN.—Plans and specifications are asked by the royal administration of the Swedish state railways until August 31 for a railway station, junctions, etc., to be erected in this city. Three prizes are offered of $3,250, $2,150 and $1,074. August Peterson, Vice-Counsel of Sweden and Norway, F and 8th Sts., Washington, D. C., can give further particulars.

WATER-WORKS.

CONTOOCOOK, N. H.—G. A. Curtice, Secy. Water Bd., writes us that this precinct voted May 27 to secure a water supply from Bean Pond, in Henniker, at a cost of about $25,000. The preliminaries are not yet arranged, but it is hoped to be ready to ask for bids for the work in a short time.

WARNER, N. H.—It is stated that this place voted recently to issue $12,000 in bonds to purchase the works of the Silver Lake Reservoir Co.

BOSTON, MASS.—Bids are asked by the Metropolitan Water Board until June 20 for laying 2,800 ft. of 48-in. cast-iron water pipe in Brookline, as stated in our advertising columns. Secy., Wm. N. Davenport, 3 Mount Vernon St., Boston.

HUNTINGTON, MASS.—J. H. Dickinson writes us that the district has appropriated $25,000 for building works and to buy a small plant at present owned by a private company. The water supply will be taken from Cold Brook. The contract will be let about July 1. Engr., Louis E. Hawes, Tremont Bldg., Boston. L. F. Hardy has charge of the work.

NEW LONDON, CONN.—Bids are asked until June 28 for tunneling and laying about 6,900 ft. of 24-in. cast-iron water pipe, as stated in our advertising columns. W. H. Richards, Supt. and Engr.

EAST WORCESTER, N. Y.—Bids are asked by the East Worcester Water Co. for furnishing pipe, hydrants, valves, castings, etc., as described in our advertising columns. Secy. and Engr., E. W. Moxley.

ROME, N. Y.—Bids are asked until June 10 for furnishing and setting an auxiliary pumping plant of 5,000,000 gallons capacity at Ridge Mills; estimated cost, $20,000. F. A. Coleman, Cy. Engr.

ASBURY PARK, N. J.—Bids are asked until June 20 for furnishing and erecting a surface condenser with a combined air and circulating pump for the water department, as stated in our advertising columns. Wm. C. Burroughs, Cy. Clk.

PERTH AMBOY, N. J.—Bids are asked until June 20 for furnishing and setting a 4,000,000-gallon pumping engine. Geo. W. Eggert, Supt. Water-Wks.

BEDFORD, PA.—It is stated that the contract for building a reservoir, as advertised in Engineering News, has been let to H. P. Malone, Hollidaysburg, Pa., at $12,146. D. S. Horn, Solicitor.

CAMBRIDGE SPRINGS, PA.—The Cambridge Springs Water Co. has been incorporated with a capital stock of $700, of which $70 is paid in. Treas., G. D. Howell, Chester, Pa.; incorporators, Ira A. Walkes, Folsom, Pa.; Henry M. Seiple, Philadelphia, and C. T. Young, Bridgeport, Pa.

CHELTENHAM, PA.—The Glenside Water Co. has been incorporated with a capital stock of $1,000 by Wm. T. B. Roberts, Jas. P. P. Brown and Chas. F. Mebus, of Philadelphia.

MEADVILLE, PA.—Negotiations for the purchase by the city of the water-works and plant of the Meadville Water Co. are pending. An ordinance providing for increasing indebtedness of the city for that purpose by $153,000 was approved on March 4. An election authorizing the increase, held on April 7, resulted in favor of same, and on May 6 a concurrent resolution of the council was passed instructing the mayor to notify the Meadville Water Co. that the city desired to take possession of the property of the company on Oct. 1, 1898, and directing him to enter into a contract in accordance with the company's proposition. E. W. McArthur, Mayor; Engr., W. A. Doane; Clk., D. T. McKay, Jr.

WARREN, PA.—An election will be held July 12 to vote on the question of issuing $50,000 in bonds for the proposed municipal works. John Masterson, Pres. Borough. Wm. O'Neil is a member of the committee.

PHILADELPHIA, PA.—R. C. Ballinger & Co. have the contract for building a smokestack at the Belmont waterworks, Fairmount Park. It will be 150 ft. high and will cost $11,000.

BENWOOD, W. VA.—The Benwood Water Co. has been incorporated with a capital stock of $200,000, of which $10,000 is paid in. Incorporators, Jas. Kinney, Jr., Engr., Bellaire, O.; E. W. Gearhart, Scranton, Pa., and C. A. Robinson, Wheeling, W. Va.

POINT PLEASANT, W. VA.—Thos. A. Dun, of Scranton, Pa., has petitioned the council for a franchise, according to reports.

ROCKINGHAM, N. C.—We are informed that W. N. Everett, Mayor, wishes to correspond with manufacturers of pumping machinery, etc., and with contractors in regard to building the proposed works. About 125,000 gallons of water a day will be required. Bonds have not yet been issued. Population, 2,500.

JACKSON, GA.—C. S. Maddox, Mayor, writes us that a committee consisting of M. L. Hendrick, Dr. W. L. Carmichael and C. G. Fennell has been appointed to investigate the question of building the proposed works. Population (1890), 922.

McCOMB, MISS.—We are informed that the board has decided not to call for bids for building the works until a vote can be taken on the question of issuing $20,000 in additional bonds for sewers and lights. The $40,000 voted for at the election May 9 being for water-works alone. Granberry Jackson, Cy. Engr., Mount Pleasant, Tenn., Sanders & Porter, Engrs., 908 Columbia Bldg., Louisville, Ky.; C. C. Jarvis, Mayor.

DELPHOS, O.—Bids are asked until June 21 for the purchase of $5,000 of 5% water bonds. W. R. Cochran, Jr., Mayor.

ELYRIA, O.—It is stated that another election will be held June 27 to vote on the question of issuing $45,000 in bonds for the purchase of the works of the Elyria Gas & Water Co., or of issuing $250,000 in bonds for the construction of new works. Consult. Engr., L. E. Chapin, Canton, O.; Mayor, M. H. Levagood; Clk., W. H. Parks.

CASS CITY, MICH.—This place voted last week to issue $18,000 in bonds for the proposed works and electric plant. Councilman C. W. Keller may be addressed.

JACKSON, MICH.—Bids are asked by the city clerk until June 28 for the purchase of $10,000 of 5% water bonds.

PAW PAW, MICH.—The question of constructing works to cost about $20,000 will probably be submitted to the voters this year. T. J. Cavanaugh and J. W. Free, Village Pres., may be addressed.

SAGINAW, MICH.—Bids are asked until June 17 for furnishing cast-iron water pipe, special castings, valves, etc., for the year. Alfred Davies, Clk. Bd. Pub. Wks.

WHITEHALL, MICH.—It is reported that the village will extend the works. J. L. Steffer, Pres.

EDWARDSVILLE, ILL.—We are informed that the contract for building the works for this place has been let to Tuxhorn Bros., of Edwardsville. It is stated that M. T. Lewman & Co., Louisville, Ky., who were reported in our issue of last week to have been awarded the contract, have refused to sign it. Engr., J. A. Holmboe, Louisville.

ODELL, ILL.—Bids are asked until June 20 for the purchase of a franchise for pumping water for the works and for lighting the village; estimated cost of works, $7,000. F. W. Francis, Cy. Clk.

KEOTA, IA.—This place voted May 31 to issue bonds for the proposed works.

FERTILE, MINN.—Bids are asked until June 20 for furnishing the materials and for building works; population (1890), 300. Engr., C. F. Loweth, 94 E. 4th St., St. Paul, and Davenport, Ia.; Mayor, John Holton; Recdr., E. L. Johnson.

WEST CONCORD, MINN.—F. T. Clifford, Mayor, writes us that plans for the proposed works, noted in last week's issue, have not yet been prepared. The village has not yet voted on the question. Further information can be secured in about a month.

WELLINGTON, KAN.—Geo. T. Pitts writes us that the city is prospecting for the sufficient water supply. As soon as a suitable supply is found the plans will be agreed upon and the work pushed as fast as possible on the proposed municipal plant. Population, 5,000.

ENDERLIN, N. DAK.—P. L. Hodge, Mayor, writes us that nothing definite has been done as yet in regard to the proposed works. An election will probably be called within the next six weeks to vote on the question of issuing bonds for works. The improvement will require 2,700 ft. of 6-in. and 1,000 ft. of 4-in. mains, 11 hydrants, 4 gate valves, etc. The works will probably be for fire protection only. About 1,000 ft. of fire hose, etc., will also be needed.

ST. JOSEPH, MO.—J. R. Rackliffe, Cy. Engr., writes us that plans are being prepared for municipal works for this city. For this purpose $2,500 has been set aside, which will be used by the committee, as noted in our issue of last week.

WYNNE, ARK.—Geo. W. Eldridge, Cy. Recdr., writes us that bids were asked until June 1 for propositions for furnishing a water supply and electric lights for this place. Population, 2,000.

GREENVILLE, TEX.—R. M. Chapman, Mayor, writes us that the city is having trouble with the Greenville Electric Light & Water Co., and unless the matter is settled soon new works will be built by the city. Population, 8,000.

KINGFISHER, OKLA.—The council is stated by local papers to have granted a 25-year franchise to Burns & McDonnell, Engrs., Kansas City, Mo., for new works and a light plant. The present plant was built by the city in 1892. The city reserves the right to purchase the works after ten years.

BRECKENRIDGE, COLO.—Fred. C. Cramer, Consult. Engr., Breckenridge, writes us that estimates are being made for the proposed works so as to call an election to vote on the question of issuing bonds for the same. There will be required about 5,300 ft. of 10 or 12-in. and 13,000 ft. of 6 or 8-in. pipe. From the reservoir to Main St. is about 4,000 ft., with a fall of 332¼ ft.

CORVALLIS, ORE.—E. Woodward writes us that the question as to whether the city will become the owner of the works, now owned by the Corvallis Water Co., or not, still remains in the courts. It is thought that no decision will be reached very soon.

HEALDSBURG, CAL.—It is stated that Geo. M. Dodge has been engaged to prepare plans for the proposed works.

VISALIA, CAL.—The Antelope Heights Water & Irrigating Co. has been incorporated with a capital stock of $40,000 by Walter H. Brown, Visalia; Wm. E. Nye, Messina, Cal.; Fred. E. Harding, Monmouth, Ill.

SANTA ROSA, CAL.—N. V. V. Smyth, Cy. Engr., writes us that work is progressing on a contract for a 40-ft. shaft and 100 ft. of tunnel extension. The contract was let at $3.30 and $4.60 a ft., respectively. J. M. Carter, Chn. Com.

COALVILLE, UTAH.—Nothing has yet been done in regard to the proposed works, except to make preliminary surveys, estimates, report, etc.; population, 1,700. Consult. Engr., Robt. C. Gemmell, 513 Dooly Bldg., Salt Lake City.

SUTTON, QUE.—An election will be held June 15 to vote on the question of issuing bonds for works.

LISTOWEL, ONT.—It is reported that an election will be held July 6 to vote on the question of issuing $17,500 in bonds for the proposed municipal works and $2,200 in bonds for a light plant. Engr., John Galt, New York Life Bldg., Toronto, Ont.; Jos. Hepples may be addressed.

IRRIGATION.

CHAMBERLAIN, S DAK.—Reports state that A. K. Mills, Fall River county, is engaged in perfecting an irrigation system to reclaim about 15,000 acres in the Hay Canyon; estimated cost, about $100,000. Water will be taken from the Cheyenne River.

HELENA, MONT.—M. F. Majers, Herbert C. Anderson, B. Borgstede and Geo. M. Borquin propose to incorporate the Sun River Co-operative Ditch Co., with a capital stock of $10,500, to construct a canal which will carry 7,500 ins. of water, to irrigate about 13,500 acres of land lying north of the Sun River.

GREAT FALLS, MONT.—M. S. Darling, Civil Engineer, Fort Benton, is preparing estimates for the construction of a ditch 14 miles long and 20 ft. wide, to irrigate 10,000 acres in Teton county. Kyle Price, Great Falls, is interested.

MANASSA, COLO.—It is proposed to organize an irrigation company, and the proposed directors are Albert Smith, Silas S. Smith, Bishop Jackson, L. M. Peterson and J. G. Fullenwider. Water will be taken from the Conejos River near Guadalupe, through a canal about 10 miles long and 25 ft. wide. The capital stock will be about $25,000.

NEW COMPANIES.—Ora Fina Co., Butte, Mont.; $1,000; to supply water for irrigation, reservoirs, etc.; John Noyes, John Noyes, Jr., James W. Forbis.

Loss Creek Irrigation Co., Circleville, Utah; $1,500; Lewison Hancock, Pres.; Myron Nay, Vice-Pres.; Alonzo L. Davis, Secy.; Louis T. Munson, Treas.; William D. Lewis, J. H. Fox, William Wilson.

Silver Creek & Saw Pitch Reservoir Co., Wales, Utah; $7,000; Nephi Rees, Pres.; Sam Dye, Vice-Pres.; Henry R. Thomas, Secy. and Treas.

Fourness Irrigating & Canal Co., Solomonville, Ariz.; $3,375; Francisco Montes, Jose Morales, Clara Fourness, Emilio Viala, Victoriano Carrasco, Peter Matthieson, Sizto Molina, Andres Serna, Jesus Flores.

Antelope Heights Water & Irrigation Co., Visalia, Cal.; to do a general irrigating business; $40,000; Walter Brown, R. W. Gould, Visalia; H. E. Nye, Messina, Cal.; Fred. E. Harding, James H. Pattee, Monmouth, Ill.

SEWERAGE.

BREWER, ME.—The question of building sewers in certain streets is being considered; estimated cost, $10,000. Aldermen Young and Worth may be addressed.

LEXINGTON, MASS.—The proposition to issue $100,000 in bonds for a new system was voted down at a recent town meeting.

WALLINGFORD, CONN.—This place has voted to issue $25,000 in bonds for the proposed trunk sewer.

ALBANY, N. Y.—The board of contract will soon ask for bids for constructing 2,210 ft. of pipe sewer in two streets. T. J. Lanahan, Clk.

BUFFALO, N. Y.—Bids are asked until June 16 for constructing 15 to 10-in. pipe sewers in two streets. R. G. Parsons, Secy. Bd. Pub. Wks.

JERSEY CITY, N. J.—Engineer Van Keuren, of the sewer and water board, has presented specifications for a sewer in 13th St., to empty into the Hudson River; estimated cost, $15,000.
D. White, Cy. Engr.

CARNEGIE, PA.—It is stated that this place will soon issue $45,000 in bonds for sewers. R. J. Hardy, Clk.; I. D. White, Cy. Engr.

MEADVILLE, PA.—Bids are asked until June 15 for constructing short sewers in two streets. D. T. McKay, Jr., Cy. Clk.——The council has passed resolutions authorizing short sewers in two other streets. W. A. Doane, Cy. Engr.; C. W. Riley, St. Comr.——Thos. McGeringan, Meadville, has been awarded the contract for a sewer in Poplar St.

TAMAQUA, PA.—Bids are asked until June 22 for constructing combined house and surface sewers. We are informed that there will be required about 1,310 ft. of 30-in. pipe sewers; estimated cost, $6,445. J. W. Dichey, Chn. St. Com.; F. B. Krebs, Pres. pro. tem.

LANSDOWNE, PA.—Bids are asked until June 17 for making soundings along the line of the proposed sewer along Darby Creek, as stated in our advertising columns. H. L. Warren, Lansdowne.

BALTIMORE, MD.—An ordinance has been passed by the council authorizing the city commissioner to reconstruct and enlarge the Harris Creek sewer, from a point in Paterson northward about one block to Baltimore St., and to extend the sewer thence in Grove Alley to Fairmount Ave.; $28,000 is appropriated for the purpose.

NEWPORT NEWS, VA.—M. Honan & Sons, Chester, Pa., are reported to have been awarded the contract for building the sewers for this city, at about $76,000.

WAYCROSS, GA.—An election will be held in this place July 9 to vote on the question of issuing bonds for the proposed system; estimated cost, $30,000. Clk., R. P. Bird; Mayor A. M. Knight may be addressed.

ASHLAND, O.—J. B. Weddell, Mansfield, O., has been engaged to prepare plans for a system.

CINCINNATI, O.—Bids are asked until June 13 for constructing a trunk sewer in Bloody Run. A. B. Rattermann, Pres. Bd. City Affairs; A. P. Butterfield, Clk.

SHELBY, O.—This city is preparing to build four or five miles of lateral sewers this season. J. B. Weddell, Engr., Mansfield, O.

YOUNGSTOWN, O.—Bids are asked until June 25 for constructing sewers in Market St. H. W. Calvin, Clk.

ZANESVILLE, O.—Bids are asked until June 11 for constructing sewers in the 7th ward. Geo. V. Fell, Chn. Com.

INDIANAPOLIS, IND.—Bids are asked until June 13 for constructing sewers in two alleys. M. A. Downing, Pres. Bd. Pub. Wks.

FORT WAYNE, IND.—The board of public works has decided to build a system in Bloomingdale.

MIDDLETOWN, IND.—Bids are asked until June 13 for constructing 1,100 ft. of pipe sewers. Clk., W. L. McCampbell; Pres. Trustees, J. A. Young.

CHICAGO, ILL.—Bids are asked until June 14 for furnishing about 1,200,000 ft. of pine lumber for the bureau of streets, and until June 15 for constructing sewers in about 30 streets. L. E. McGann, Pres. Bd. Local Improvements.

GALESBURG, ILL.—The construction of certain sewers at a cost of about $53,718 is proposed, according to reports. M. J. Blanding, Cy. Engr.; J. J. Tunnicliff, Mayor; A. W. Truedson, Cy. Clk.

MILWAUKEE, WIS.—Bids are asked until June 22 for the purchase of $80,000 of 5% sewer and $80,000 of garbage disposal bonds. J. R. Wolf, Cy. Comptroller.

SAUK CENTRE, MINN.—L. P. Wolff, Red Wing, Minn., is preparing plans for a separate system for this place. The plans will be presented to the council about June 15.

TWO HARBORS, MINN.—J. L. Lunz writes us that the contract for constructing 2,500 ft. of sewers and two blocks of grading has been let to J. D. O'Connell, Duluth, at about $8,000. C. P. Frank, Chn. Com.

NEW HAMPTON, IA.—B. W. Cotant, Mayor, writes us that the contract for constructing 4,000 ft. of 15, 12 and 8-in. pipe sewers, will be let about Aug. 1; average cut, 8 ft.; estimated cost, $2,500.

SAN LUIS OBISPO, CAL.—The city engineer is reported as preparing plans for the proposed system.

FOLSOM CITY, CAL.—The prison commissioners have asked the state board of examiners for authority to issue $15,000 in bonds for a system for the prison in this city.

SAN FRANCISCO, CAL.—City Surveyor Tilton has submitted plans for sewers in a large number of streets.

MEXICO, MEX.—Louis H. Meyer, Secy. and Treas. Heman Construction Co., 108½ North 8th St., St. Louis, Mo., writes us under date of June 1 that this company has not been awarded the contract for constructing a system for this city, reported in our issue of May 26. The company is at present figuring on another contract in this city; but at this date it cannot give any information.

GARBAGE DISPOSAL—STREET CLEANING

HARTFORD, CONN.—The Edward Balf Co. has been awarded the contract for removing the ashes at $10,000 and for removing garbage at $9,850 a year.

UTICA, N. Y.—Henry Stappenback, West Utica, N. Y., has been awarded the contract at $2,500 a year for five years for removing and disposing of the garbage and night soil. It is said that the disposal plant will be built.

LANCASTER, VA.—Councilman Miller has presented a resolution authorizing the purchase of a disposal plant to cost about $8,000.

NEWPORT NEWS, VA.—Local papers state that the council is considering the question of making a new garbage removal contract, the old one with E. W. Wingfield having expired May 31.

EVANSVILLE, IND.—Bids are asked until June 18 for sprinkling a number of streets from June 20 to Nov. 1, four times a day. Geo. W. Swearingen, Clk.

STREETS AND ROADS.

PORTLAND, ME.—Bids are asked until June 14 for furnishing about 8,000 sq. yds. of granite paving blocks. Hanson S. Clay, Chn. Com.

CLINTON, MASS.—Bids are asked until June 20 for building a road at the Wachusett Reservoir, as stated in our advertising columns. Wm. N. Davenport, Secy. Metropolitan Water Bd., 3 Mount Vernon St., Boston.

HANCOCK, MASS.—Bids are asked until June 9 for building 3,000 lin. ft. of highway. T. C. Mendenhall, Chn. Massachusetts Highway Comn., Boston.

NORTH ADAMS, MASS.—A contract has been awarded to W. H. Lally & Co., at $15,120, for paving in four streets with brick. John H. Emigh, Comr. Pub. Wks.

WINCHESTER, MASS.—The town has appropriated $3,500 for the purchase of a steam road roller and $2,500 for the improvement of Harvard and William Sts.

WILTON, CONN.—Bids are asked until June 16 for grading and graveling one mile of road; surety, $1,000. Elmer Jackson, First Selectman.

MIDDLETOWN, CONN.—Bids are asked until June 15 for constructing asphalt or concrete walks and grading, curbing, etc., in Union Park. Frank D. Haines, Cy. Attorney and Secy., 266 Main St.; Henry E. Weeks, Chn. Improvement Com.

ALBANY, N. Y.—Bids will soon be asked for the following work: Green St., 10,521 sq. yds. of brick paving; Van Woert St., 2,750 sq. yds. of brick paving and 2,250 lin. ft. of 6-in. curb; First St., 4,950 sq. yds. of brick paving and 3,000 lin. ft. of 6-in. curb. T. J. Lanahan, Clk. Bd. Contract.

CORTLAND, N. Y.—E. E. Mellon informs us that the village is about to pave Main St. for one mile.

GLENS FALLS, N. Y.—G. P. Slade, Cy. Engr., 38 Glen St., writes us that the board of trustees has passed a resolution to pave a section with brick. W. H. Haskell, Pres.

HORNELLSVILLE, N. Y.—Bids are asked until June 13 for the purchase of $9,500 of 6% paving bonds. Sidney Ossoski, Cy. Clk.

NORWICH, N. Y.—Bids are asked until June 16 for 26,500 sq. yds. of asphalt or brick paving; estimated cost, $72,000, as stated in our advertising columns. J. B. Turner, Pres. Bd. Trustees; Henry C. Allen, Engr., 424 Kirk Block, Syracuse.

ROCHESTER, N. Y.—Bids are asked until June 14 for constructing pavement in the following streets, according to the estimated cost: Elizabeth St., stone block, $3,050; Linden and Yale Sts., asphalt, $20,850; Post St., macadam, $7,550, and for constructing a sewer in West Ave., estimated cost, $1,150. Edwin A. Fisher, Cy. Engr.; Chas. M. Beattie, Clk.

TROY, N. Y.—Bids are asked until June 14 for sheet asphalt paving on Fifth Ave., between Broadway and Hoosick St. E. Ogden Ross, Secy. Contracting Bd.

CRANBURY, N. J.—Bids will soon be asked by the county freeholders for macadamizing the road from South River to South Amboy and a section of the Cranbury turnpike. The road from Cranbury to Cranbury station is also to be macadamized.

HOBOKEN, N. J.—Bids are asked until June 22 for the improvement of Jackson St., from Fourth to Fifth St., and Fifth St., between Jackson and Monroe Sts. M. V. McDermott, Cy. Clk.

NEWARK, N. J.—Bids are asked until June 9 for paving in portions of eight streets. M. F. McLaughlin, Supt. Bd. St. Comrs.

CARNEGIE, PA.—Bids are asked until June 10 for about 6,000 sq. yds. of brick paving and 4,800 lin. ft. of curb in three streets; estimated cost, $10,500. J. D. White, Engr., P. O. Box 1020, Carnegie; R. J. Hardy, Cy. Clk.

CURWENSVILLE, PA.—Bids are asked until June 13 for 6,000 sq. yds. of brick paving in Filbert St. and Susquehanna Ave.; estimated cost, $8,000. W. A. Moore, Cy. Engr.; D. A. Moore, Clk.

MEADVILLE, PA.—Bids are asked until June 22 for about 11,160 sq. yds. of brick paving, curbing, etc. W. A. Doane, Cy. Engr.; D. T. McKay, Jr., Cy. Clk.——Ordinances are before the council to pave portions of three other streets. Emmett W. McArthur, Mayor.

BALTIMORE, MD.—We are informed that the council has made the following appropriations for street work: Grant St., $650 for asphalt paving; Fulton Ave., $25,000 for park work and asphalt paving; Mount Royal Ave., $48,000 for sheet asphalt paving.

NEWPORT, KY.—Bids are asked until June 15 for paving Sixth St., from York St. to Monmouth St., with brick, as stated in our advertising columns. W. L. Glazier, Cy. Engr.

ALLIANCE, IND.—A contract has been awarded to Davis & Caldwell, Youngstown, at $17,098, for paving Main St. with asphalt.

ASHLAND, O.—About 1¼ miles of brick paving will be constructed. F. L. Niederheiser, Cy. Engr.

BOWLING GREEN, O.—Bids are asked until June 27 for the purchase of $5,000 of 5% street improvement bonds. Alex. Williamson, Cy. Clk.

CANTON, O.—Bids are asked until June 20 for furnishing the material and for constructing certain improvements in portions of six streets, and until July 2 for brick paving in West 10th St. and furnishing the materials. L. E. Chapin, Cy. Engr.; L. M. Ley, Cy. Clk.

CHILLICOTHE, O.—H. M. Redd, Cy. Engr., has submitted an estimate of $24,973 for the proposed brick paving on Paint St. and Second St.

CLEVELAND, O.—Bids are asked until June 18 for grading, curbing, constructing sidewalks and brick paving on the grounds of the Division St. pumping station. Geo. R. Warden, Dir. Pub. Wks.

MALTA, O.—Bids will soon be asked for about 15,000 sq. yds. of brick paving, according to reports. Paul R. Murray, Engr.

RAVENNA, O.—Bids are asked until June 24 for furnishing the material and for paving, curbing, etc., on Main St. A. S. Cole, Mayor; S. J. Post, Village Clk. Ordinances have been passed to construct stone sidewalks in portions of eight streets.

TOLEDO, O.—Bids are asked until July 11 for block paving and furnishing the material in four streets, and for macadamizing in Bancrost St. L. P. Harris, Cy. Clk.

UHRICHVILLE, O.—Bids are asked until June 15 for paving the approach to the cemetery with brick. R. W. Walton, Clk.

BEDFORD, IND.—Bids are asked until June 14 for macadamizing five sections of roads, including a distance of about 11½ miles. John B. Malott, County. Audr.

EVANSVILLE, IND.—Bids are asked until June 25 for improving Washington Ave., from Garvin St. to Kentucky Ave., by grading and curbing. Geo. W. Swearingen, Clk.

VALPARAISO, IND.—Bids are asked until June 18 for constructing certain gravel roads. M. J. Stinchford, County Audr.

SAGINAW, MICH.—Bids are asked until June 11 for the purchase of $50,000 of 4% street improvement bonds. Arthur F. Lewis, Comptroller.

SAGINAW, MICH.—Bids are asked until June 10 for furnishing the material and paving on Michigan Ave. with brick, and until June 17 for furnishing and constructing asphalt paving on the same street. Alfred Davies, Clk. Bd. Pub. Wks.

PROVISO, ILL.—Bids are asked until June 13 for constructing four miles of macadam road. R. E. Williams, Engr., 84 La Salle St., Chicago; Jacob Bohlander, Town Clk., Maywood.

DECORAH, IA.—The council will vote June 22 on a proposition to pave eight blocks with brick on concrete. Boynton & Warriner, Engrs., Cedar Rapids, Ia.; E. Mather, Clk.

MARSHALLTOWN, IA.—T. G. Pierce, Mayor, informs us that a contract has been awarded to P. T. Walsh, Davenport, Ia., for constructing 45,000 sq. yds. of brick pavement; estimated cost, $65,000. Wm. Brenner, Cy. Engr.

ST. LOUIS, MO.—Bids are asked until July 1 for furnishing and hauling macadam, screened gravel and constructing and repairing brick sidewalks. Robt. E. McMath, Pres. Bd. Pub. Improvements.

MANUFACTURING PLANTS.

BRIDGEPORT, CONN.—Plans have been prepared for the Hammond Co. for an addition to its plant at Housatonic Ave. and Congress St. Arch., Jos. A. O'Brien.

TRUMANSBURG, N. Y.—A fire in this village June 4 damaged the Gregg Iron Works and the Morse Chain Works, causing a reported loss of $50,000 on each plant.

MONESSEN, PA.—It is reported that the National Tin Plate Co. has decided to increase the capacity of its plant at this place, at a cost of about $125,000.

LOCKLAND, O.—One of the Haldeman paper mills at this place has been destroyed by fire; estimated loss, $50,000.

PORTSMOUTH, O.—The rolling mill and steel plant of the Burgess Steel & Iron Co. was burned June 6, causing a reported loss of $350,000; insurance, about $200,000. Eight hundred employees are thrown out of work.

CHICAGO, ILL.—The plant of the Illinois Wall Paper Co. was damaged by fire June 3; estimated loss, $50,000.

MARINETTE, WIS.—Plans are being perfected, according to reports, for ten factory buildings to be built here for the A. W. Stevens Co., to cost $30,000. Archs., Ferry & Clas, 419 Broadway, Milwaukee, Wis.

SUPERIOR, WIS.—The plant of the Webster Mfg. Co. was destroyed by fire June 4, causing a loss of about $175,000; partially insured.

FIRE HOSE.—New York, N. Y.—Bids are asked until June 15 for furnishing 15,000 ft. of 2½-in. fire hose. John J. Scannell, Comr. Fire Dept.

DITCH.—Greenfield, Ind.—Bids are asked until June 10 for constructing a drainage ditch; bond, $100. Andrew Fink, Drainage Comr.; Wm. J. Cleary, County Surv.

TELEPHONE SYSTEM.—Athens, O.—The council has granted a franchise to the Chillicothe & McArthur Telephone Co., Chillicothe, to operate an exchange.

FIRE BOAT.—Chicago, Ill.—The following bids were received May 28 for furnishing a steel fire boat and apparatus. D. L. Swenie, Fire Marshal: Racine Boat Co., Racine, Wis., total, $66,385; hull, $36,100; engines, $10,000; boilers, $10,285; pumps, $10,000. Chicago Ship Building Co. Chicago., total, $68,500. Detroit Dry Dock Co., Detroit, Mich., total, $58,665.

BIDS RECEIVED AT MEADVILLE, PA., MAY 25, FOR BRICK PAVING AND FOR CONSTRUCTING A STORM SEWER.

Items and quantities.	Ross & Robinson, Meadville, Pa.	*Edwd. H. Post, Wilkes-Barre, Pa.	Osborn & Fredericks, Franklin, Pa.	Alcatraz Paving Co., Philadelphia.	†James McAffee & Co., Allegheny, Pa.	Davis & Caldwell, Youngstown, O.	Ward & Stucker, Harrisburg, Pa.	Henry Gantz, Columbus, O.	Churchyard & Dutro, Buffalo, N. Y.	Thomas McGuigan, Meadville, Pa.	Peter Schenck, Butler, Pa.
Makes of brick offered and bid on:											
Brady Run Paving Co. ..... Wire cut	$1.62	$1.70	.....	$1.55	$1.35	.....	.....	$1.41	.....	$1.57	.....
Brady Run Paving Co. ..... Repressed	...	...	...	1.63	1.43	.....	.....	1.49	...	1.60	1.64
Canton (Ohio) Brick Co.	...	1.70	...	1.53	...	.....	.....	1.41	.....	...	...
" " "	...	...	...	1.58	...	.....	.....	1.46	.....	1.60	1.63
Franklin, Pa.	1.62	...	1.55	...	1.30	.....	.....	1.38	.....	1.54	1.54
Jamestown (N. Y.) Block	1.62	1.73	...	1.53	1.35	.....	1.51	1.37	.....	1.54	...
Mack Mfg. Co.	1.62	1.70	...	...	1.27	.....	1.47	1.33	1.66½	...	1.55
" " 12,400 sq. yds.	...	...	...	...	1.35	.....	1.50	1.41	1.74½	1.57	1.59
Minerva Paving Brick Co.	1.62	1.66	...	1.45	...	$1.60	1.45	1.33	1.66	...	...
" " " "	...	...	...	1.47	...	...	1.47	1.35	1.68	...	...
Park Fire Clay Co.	1.60	1.70	...	1.48	1.29	1.70	...	1.35	1.68½	...	...
" " " "	...	...	...	1.57	1.37	...	...	1.43	1.76½	1.57	1.58
Townsend Brick Co.	...	1.62	...	1.42	1.24	...	1.42	1.30	...	...	...
Curbing, a lin ft. ..... 5 × 22-in., 6,660 ft.	.40 to .46	.50	.50	.43 to .45	.39 to .44	.45	.50 to .54	.45 to .50	.44½ to .47	.44 to .48	.44
Curbing, a lin ft. ..... 5 × 24-in., 1,000 "											
4 × 18-in. crossing curb, a lin. ft. ..... 140 "	.33 to .36	.45	.50	.30	.30	.35	...	.51	.39	...	.39 to .40
Edge stones, a lin. ft. ..... 4 × 18-in., 200 ft.	.15	.45	.50	.17 to .30	.15 to .30	.20	.49	.10	.20 to .35	.24	.35 to .40
Edge stones, a lin. ft. ..... 2½ × 12-in., 400 "											
Cast iron gutter plates, etc., a lb. ..... 9,800 lbs.	.02	.03	.02	.02¼	.01¾	.03	.02	.02½	.02½	.02½	.01¾
Catchbasins ..... 5 each.	26.00	45.00	28.00	50.00	24.00	40.00	27.00	27.00	32.00	30.00	28.00
Special catchbasins	20.00	...	40.00	10.00	35.00	...	35.00	37.00	...	35.00	37.50
4-in. pipe sewer underdrain ..... 3,000 lin. ft.	.08	.15	.26	.09	.08	.10	.08	.05	.10	.10	.19
Storm sewers: 20-in. ..... 360 " "	.60	1.20	.57	...	.80	.57	.66	.66	.64	.77	.68
24-in. includg removing 250 ft. 18-in. pipe 950 " "	.80	1.40	.72	...	1.07	.70	.79	.85	.77	.97	.88
15-in. ..... 130 " "	.40	1.00	.41	...	.57	.45	.40	.44	.45	.47	.49
12-in., ... 320 " "	.30	.72	.36	...	.47	.41	.39	.37	.39	.39	.44
10-in. ..... 280 " "	.28	.68	.32	...	.41	.30	.35	.30	.36	.31	.38
6-in. ..... 50 " "	.25	.55	.27	...	.31	.15	.30	.22	.22	.20	.22
Total for paving	$23,642	$25,220	$24,536	$21,832	$19,047	$24,250	$22,373	$20,228	$25,316	$22,966	$23,224
Total for storm sewer	1,215	2,318	1,160	.....	1,659	1,151	1,278	1,316	1,257	1,481	1,380

*$1.50 per yd. extra for all rock excavation. †The mimimum bid was on Townsend brick; the accepted bid was $19,940.90 and Mack brick.

SIOUX RAPIDS, IA.—The Sioux Rapids Mill Co.'s plant, together with the plant of the Sioux Rapids Electric Light & Power Co., were burned June 1. Loss on building and machinery of the mill company about $10,000.

SALT LAKE, UTAH.—The Portland cement works at this place were destroyed by fire May 31, causing a loss of about $40,000; insurance, $25,000.

GAS PLANTS.

GLOVERSVILLE, N. Y.—Reports state that the Johnstown & Gloversville Gas Co. will construct a new plant on Hill St. for the manufacture of water gas; estimated cost, $100,000.

ONEIDA, N. Y.—The board of trustees has granted a 15-year franchise to the William J. Weixel Co., of Pennsylvania, which proposes to sink a well at a cost of about $5,000 for piping natural gas.

NEW YORK, N. Y.—Bids are asked until June 30 for furnishing the materials and for installing a new gas apparatus at Randall's Island. John W. Keller, Pres. Dept. Pub. Charities, 66 Third Ave.

ATHENS, O.—The council has passed an ordinance granting a 10-year franchise to the Athens Gas Light & Electric Co. for furnishing natural gas for heating and other purposes. C. H. Welch, Supt.

MOUNT CLEMENS, MICH.—It is reported that George H. Paine and William G. Smith, Detroit, have been granted a franchise to operate gas works. They have incorporated the Mount Clemens Gas Co. with a capital stock of $50,000.

NEW COMPANIES.—Canastota Gas Co., Canastota, N. Y.; $3,000; to sink a well for furnishing natural gas; William H. Patten, Norman Stafford, H. R. Murray, Milton De Lano, Canastota; Frank P. Rust, Ithaca.

MISCELLANEOUS CONTRACTS.

PARK.—Montpelier, Vt.—Plans have been prepared for the laying out of a park. Joel Foster, Cy. Engr.

BONDS.—Avalon, Pa.—Bids are asked until June 16 for the purchase of $26,000 of 4% bonds. A. M. Kirker, Chn. Com.

PARK WORK.—Middletown, Conn.—Bids are asked until June 15 for improving the South Park. James P. Stow, Cy. Clk.

STEAM TENDERS.—St. Louis, Mo.—Capt. H. E. Waterman, U. S. Engr., 2732 Pine St., informs us that the following bids were received May 27 for furnishing five steel-hulled steam tenders, as advertised in Engineering News:

DREDGING.—Delaware River.—Bids are asked until July 5 for dredging in the Delaware River, as stated in our advertising columns. Lieut.-Col. C. W. Raymond, U. S. Engr., Philadelphia.

DREDGE.—New Orleans, La.—Bids are asked until June 24 for hiring a dredge for the improvement of Bayou Lafourche. Maj. Jas. B. Quinn, U. S. Engr., Custom House, New Orleans.

EXCAVATING, ETC.—Admiralty Head, Wash.—Bids are asked until June 30 for excavating and grading at Admiralty Head, Wash. Harry Taylor, U. S. Engr., Burke Bldg., Seattle, Wash.

PARK WORK.—New York, N. Y.—Bids are asked until June 18 for grading Hamilton Fish Park and William H. Seward Park. George C. Clausen, Comr. Parks, Arsenal Bldg., Central Park.

MASONRY SUBWAY.—Newark, N. J.—Bids are asked until June 17 for constructing a masonry subway, as stated in our advertising columns. A. Church, Secy. Essex County Park Comn., 800 Broad St.

BRICK, ETC.—Jersey City, N. J.—Bids are asked until June 15 for furnishing brick, clay, Rosendale cement, Portland cement, lime, sand, etc., and also 5,000 surveyor's stakes, joists, lumber, etc. Geo. T. Bouton, Clk.

DOCKS.—Newcastle, Eng.—Reports state that owing to increased trade on the Tyne the Newcastle quayside committee has under consideration a proposal for the improvement and extension of docks at a cost of $1,100,000, with a view of meeting the increased demand for room for loading and discharging.

FIRE HOSE.—Chicago, Ill.—The following bids were received June 1 for furnishing about 15,000 ft. of 2½-in. fire hose; D. L. Swenie, Fire Marshal: Chicago Fire Hose Co., 75 cts. a ft., National Jacket; Eureka Fire Hose Co., 85 cts., Woven Knit; 75 cts., New Enterprise; 75 cts., New Peerless; 75 cts., Paragon. Tate & Co., 75 cts., Goodrich Knit; 75 cts., Goodrich Woven. W. D. Allen, 50 cts., Dewey. Revere Rubber Co., 55 cts., Beacon. N. J., C. S. & R. Co., 75 cts., Charter Oak; 80 cts., Welby. J. M. Hardy, 75 cts, Boston Woven. G. P. Mfg. & R. Co., 75 cts., Baker Fabric. Chicago R. & B. Co., 80 cts., Columbia; 70 cts., Keystone. American Fire Hose Co., Boston, Mass., 85 cts., American Matchless; 70 cts., Dandy; 70 cts., American Double; with couplings 5 cts. additional.

MACHINERY.—Mariupol, Russia.—Press reports state as follows: Advices have reached merchants of New York giving an idea of the opportunities which will soon be offered to machinery, electrical effects and railway material manufacturers at Mariupol. As the port of Mariupol is not large enough to cope with its growing trade, the representatives of the South Russian mining and industrial interests held a meeting recently at Kharkoff and made the following representation to the Imperial Government: That the port territory be considerably increased by the construction of another basin, to the westward of the existing one, the present gates serving for both, to expand the railway system, and, in one word, bring the port into a fit state to cope with an annual trade of about 800,000 tons; but as the carrying out of the necessary measures will take at least three or four years, they propose that, in the meantime, the following should be attended to without delay: To construct a second crane for lifting heavy machinery, and several smaller ones for loading and discharging other goods. To install the electric light plant, thus enabling work to be performed both day and night. To increase the dredging operations in order to obtain a depth of 18 ft. throughout the harbor. All these improvements will require a considerable outlay of capital, but it is well known that the improvements will be undertaken at an early date and the necessary machinery, etc., must be purchased abroad.

CONTRACT PRICES.

PAVING SEWER, ETC.—Meadville, Pa.—We are informed that the following bids were received May 25 for brick paving and for constructing a storm sewer, as advertised in Engineering News; contract awarded James McAfee & Co.; the bids for brick paving are to be on concrete foundation; D. T. McKay, Jr.:

SUBMERGED SEWER PIPE.—New Rochelle, N. Y.—We are informed that the following bids were received May 21, for furnishing and laying a submerged cast-iron pipe for sewer outlet, Section 14, as advertised in Engineering News; contract awarded Michael J. Dady; Jas. K. Wilkes, Engr.:

Quantities.	Michael J. Dady, Brooklyn, N. Y.	R. G. & J. S. Packard, New York.	MacRitchie & Nichol, Chicago, Ill.
24-in. pipe* ..... 2,200 lin. ft.	$16.85	$21.00	$36.00
Bell and spigot pipe 800 " "	6.50	6.00	7.25
Creosoted piling .... 7,500 " "	.60	.55	1.20
10x10-in. timber .. 10 M. ft.	90.00	90.00	110.00
Total	$47,670	$56,025	$95,100

*Ward flexible joint pipe; laid in trench; sand, gravel, loose rock and solid rock; average depth of excavation about 4 ft.; depth of water at high tide, from 11½ to 30 ft. The bell and spigot pipe is laid on creosoted pile and timber foundation; depth of water at high tide about 30 ft.

SEWER TUNNEL.—New Rochelle, N. Y.—We are informed that the following bids were received May 21 by the commissioners of sewers for constructing a tunnel 6 ft. × 8 ft. mostly through solid rock, to be lined with brick masonry if necessary; it will all be below mean high water; and a sewer in Section 13; James K. Wilkes, Engr.:

Quantities.	Michl J. Dady, Brooklyn, N. Y.	Saml W. Frescoln, Reading, Pa.	Peter Sweeney, D'nb'ry, Conn.
24-in. vitrified pipe. 270 lin. ft.	$2.87	$6.70	$2.45
Cast-iron pipe .... 500 " "	3.50	2.25	4.65
Rock excav., tunnel 1,000 cu. yds.	6.00	7.40	7.45
Earth " " 360 " "	.75	5.00	2.85
Brk mas, tunl lin'g 120 " "	12.00	12.00	13.50
Tunnel manholes .. 60 vert. ft.	50.00	8.00	6.75
Rck exc., tnl manhls 50 cu. yds.	10.00	9.00	4.50
Dry stone mas'y. .. 30 " "	3.00	3.00	3.00
Rck exc, awr trench 100 " "	2.75	5.00	4.50
Manholes, complete. 2 each	60.00	55.00	45.00
Sluice gates in psitn 2 "	115.00	150.00	90.00
Gate chambr, cmplt 1.	350.00	250.00	100.00
Total	$14,800	$15,754	$14,623

Bids Received at St. Louis, Mo., May 27, for Furnishing Five Steel-Hulled Steam Tenders.

Bidder.	1 tender; Nos. 1, 2, 3 or 4.	2 tenders; Nos. 1, 2, 3 or 4.	3 tenders; Nos. 1, 2, 3 or 4.	4 tenders; Nos. 1, 2, 3 or 4.	1 tender, No. 5.	2 t'nd'rs; No. 5, & 1 of 1, 2, 3 or 4.	3 tenders; No. 5, & 2 of 1, 2, 3 or 4.	4 tenders; No. 5, & 3 of 1, 2, 3 or 4.	5 tenders; Nos. 1, 2, 3, 4 or 5.	—Additional— Each p'r comp. engines.	Each ref'ger ating plant.
Edward Flad, St. Louis, Mo.	$87,542	$127,546	$190,722	$253,888	$68,813	$129,551	$192,707	$255,883	$319,049	$5,500	$2,250
Craig Ship-Building Co., Toledo, O.	49,975	99,172	147,750	196,400	50,986	100,950	149,985	199,788	246,400	6,500	3,600
Springfield Boiler & Mfg. Co., Springfield, Ill.	57,867	113,678	169,489	224,300	58,715	115,582	172,393	228,204	282,015	5,000	3,200
Marietta Boiler Works, Marietta, O.	.....	122,868	.....	.....	.....	.....	.....	.....	.....	.....	700
Iowa Iron Works, Dubuque, Ia.	45,990	91,480	136,470	181,960	46,990	92,390	137,380	182,870	228,360	3,000	.....
Shook-Anderson Mfg. Co., Pittsburg, Pa.	68,250	134,900	.....	.....	71,550	139,000	.....	.....	.....	.....	3,296
Cincinnati M. R. Co., Cincinnati, O.	65,464	130,928	.....	.....	.....	.....	.....	.....	.....	.....	.....
Riter & Conley, Pittsburg, Pa.	73,900	147,800	221,700	295,600	74,400	148,300	222,200	296,100	370,000	5,000	4,500
E. J. Howard, Jeffersonville, Ind.	.....	102,640	.....	.....	.....	.....	.....	.....	.....	.....	1,850

IMPROVING CREEK.—Tiffin, O.—Bids are asked until June 20, and until June 25 for straightening Wolf Creek. C. J. Peters, County Surv.

BONDS.—Columbus, O.—Bids are asked until June 10 for the purchase of $300,000 of bonds. Malcolm Jennings, Clk. Comrs. Sinking Fund.

PILING, DREDGING, ETC.—Boston, Mass.—Bids are asked until June 15 for building fill jetties at the mouth of Menasusha Inlet, Martha's Vineyard, and for cutting a new outlet for Scorton River in Sandwich. Woodward Emery, Chn. Harbor and Land Comrs., State House, Boston.

SEWERS.—Scranton, Pa.—The following bids were received June 2 for constructing sewers in the 11th ward, all bidders of Scranton: Donohoe & O'Boyle, $1.78 a lin. ft. complete, extra basins $95.00, extra manholes $35.00; Flanagan & O'Hora, $1.80 a ft. complete, extra basins $80.00, extra manholes, $35.00; V. H. O'Hara, $1.85 a ft. complete, extra basins $80.00, extra manholes $30.00. Length of sewer, 3,400 ft. of 8, 10, 12, 15 and 18-in. pipe; average depth, 9 ft. The price per lineal foot includes the building of 23 manholes, 10 basins and 106 house connections (about 1,750 ft.). Joseph P. Phillips, Cy. Engr.

BRICK PAVING.—Holyoke, Mass.—O. C. Terry, Asst. Clk. Bd. Pub. Wks., informs us that the following bids were received May 20 for brick paving, as advertised in Engineering News; the contract was awarded May 27 to the Eastern Paving Brick Co., Catskill, N. Y., for wire-cut brick at $16.75 a 1,000, f. o. b. cars Holyoke; this company furnished the brick used in this city last year; the Mack Mfg. Co., Jersey City, bid $18.00 a 1,000 on repressed brick with lugs and grooves; the Athens (O.) Brick Co. bid $1.13½, and the Nelsonville (O.) Sewer Pipe Co. bid $1.00½, a sq. yd. on paving block:

Bidder.	Price a 1,000.—Brick.—Paving block.	Wire cut.	Repressed.
Clearfield (Pa.) Clay-Working Co..	$25.00	.....	.....
Eastern Pvg Brk Co., Catskill, N.Y.	.....	$16.75	$17.75
N.Y. Brk & Pvg Co., Syracuse, N.Y.	.....	15.00	.....
Mack Mfg. Co., Jersey City	25.30	17.00	18.00
McMahan, Porter & Co.*	25.50	18.25	19.50

*West Cumberland, Md.

SEWERAGE SYSTEM.—Parnassus, Pa.—We are informed that the following bids were received May 19 for constructing a system, as advertised in Engineering News; Engr., S. A. Taylor, 339 5th av, Pittsburg, Pa.:

Bids Received at Parnassus, Pa., May 19, for Constructing a Sewerage System.

Quantities.	Smith & Wood, Tarentum, Pa.	Como, Acetae & Co., Pittsburg, Pa.	Chas. Kohme, Pittsburg, Pa.	Jas. G. Corcoran, Pittsb'rg, Pa.	E. F. Hughes, Pittsburg, Pa.	K. Bracken, Pittsburg, Pa.	Ott Bros, Alleghany, Pa.	Sweeney Houston, Burg, Pa.	C. M. Driver, Pittsburg, Pa.	Toronto Con-st'n Co., Toronto, O.	Rinner & Mc-Quistin, Butler, Pa.	James M. Dieterle, Pittsburg, Pa.	Angelo Pandolfo, N. Kensington, Pa.	Cronin & O'Herron, Pittsburg, Pa.	John P. McIntire, McKeesport, Pa.
Masonry	.....	$4.50	$4.50	$6.00	$2.50	.....	$3.75	$4.50	$7.50	$12.00	$8.00	$4.00	$1.00	$4.00	$5.50
Concrete	.....	3.75	4.50	5.00	2.50	$3.80	3.75	4.50	4.50	7.50	5.00	4.50	2.25	4.50	5.00
Cast-iron pipe	$48.00	34.00	32.00	.....	17.00	11.50	18.00	35.00	16.00	25.00	20.00	30.00	16.00	18.00	16.00
Manholes ..... 57 each	22.50	32.00	23.00	28.00	28.00	30.00	24.00	31.00	22.00	20.00	28.00	17.00	28.00	21.00	35.00
Lampholes ..... 25 "	4.00	2.50	5.00	5.00	4.00	10.00	5.00	5.00	2.85	2.50	5.00	3.50	32.50	6.00	3.00
Receiving basins 26 "	26.50	30.00	63.00	30.00	36.00	50.00	35.00	44.00	33.00	26.00	25.00	18.00	25.00	43.00	35.00
S. flushtanks ... 11 "	30.00	46.00	37.00	55.00	30.00	37.00	50.00	35.50	70.00	20.00	28.00	30.00	25.00	30.00	45.00
D. " ... 7 "	42.00	50.00	40.00	73.00	45.00	45.00	60.00	70.00	110.48	20.00	29.00	35.00	28.00	30.00	60.00
Pipe 24-in. ..... 440 lin. ft.	.73	1.32	1.08	1.39	1.07	1.29	1.14	.90	.98	.77	.80	.80	1.05	1.05	1.05¾
Pipe 20-in. .... " "	.61	.88	.78	...	.63	1.20	.87	.63	.64	.63	.70	.70	.85	.85	.85¾
Pipe 18-in. ..... 870 " "	.52	.72	...	.92	.54	1.07	.72	.58	.57	.54	.56	.60	.70	.73	.72½
Pipe 15-in. ..... 1,440 " "	.46½	.52	.48	.75	.51	.87	.66	.52	.53	.50	.44	.48	.60	.53	.49¾
Pipe 12-in. ..... 2,154 " "	.39½	.35	.41	.69	.45	.49	.53	.38	.44	.35	.39	.36	.45	.49	.42¾
Pipe 10-in. ..... 5,840 " "	.37½	.33	.38	.58	.44	.45	.48	.36	.36	.30	.37	.32	.40	.46	.38¾
Pipe 9-in. ..... 2,780 " "	.33½	.32	.36	.56	.41	.42	.35	.30	.36	.28	.36	.30	.30	.42	.37½
Pipe 8-in. ..... 9,170 " "	.29½	.28	.34	.54	.38	.39	.33	.27	.30	.23	.35	.28	.30	.38	.33¾
Pipe 6-in. ..... 300 " "	.20	.20	.32	.37	.30	.35	.27	.25	.30	.25	.34	.22	...	.36	.33½
Lumber	...	16.50	15.00	20.00	10.00	21.00	14.00	16.00	22.00	20.00	4.00	18.00	12.00	15.00	16.00
Total	$10,836	$11,617	$12.236	$17,542	$13,205	$15,384	$13,701	$11,888	$12,309	$9,236	$11,668	$9,777	$11,584	$13,467	$13,283

EDGESTONES AND FLAGSTONES.—Haverhill, Mass.—B. W. Davis, Clk. Com., informs us that the following bids were received May 31 for furnishing edgestones and flagstones as advertised in Engineering News; contract awarded Thomas Lahey; estimated difference of 2 cts. a ft. in favor of hauling, as stone is wanted from cars:

Bidder.	Edgestones, 4,500 ft.	Flagstones, 2,000 ft.
*Thomas Lahey, Haverhill, Mass.	$0.35	$0.33
*Frank G. Cummings & Co., Haverhill.	.35	.38
†Hooper, Havey & Co., No. Sullivan, Me.	.35	.35
*New Eng. Granite Wks., Concord, N.H.	.45	.39
†Frank Bradbury, West Franklin, Me.	.33	...
†Frank Bradbury, W. Franklin, Me. 16 ins. wide		.28
†Frank Bradbury, W. Franklin, Me. 18 " "		.30
†Frank Bradbury, W. Franklin, Me. 20 " "		.32

*F. o. b. cars Haverhill. †F. o. b. wharf Haverhill.

PIPE SEWERS.—Quincy, Mass.—We are informed that the following bids were received June 2 for constructing pipe sewers in Section 5 of the sewerage system; Engr., E. W. Branch, Quincy:

Bids Received at Quincy, Mass., June 2, for Constructing Pipe Sewers in Section 5.

Bidder.	Excavation—Earth—8 ft. deep, 17,300 cu. yds.	8 to 14 ft., 3,700 cu. yds.	14 to 20 ft., 250 cu. yds.	Below 20 ft., 10 cu. yds.	Rock—8 ft. deep, 200 cu. yds.	8 to 14 ft., 50 cu. yds.	Below 14 ft., 25 cu. yds.	Masonry—Brick, 300 cu. yds.	Concrete, 300 cu. yds.	Laying—Sewer pipe—8 and 12 and 13,750 lin. ft.	15-in., 1,070 lin. ft.	18-in., 400 lin. ft.	Underdrain, 7,000 lin. ft.	Chimneys, 400 vert. ft.	Lumber in place and secured, 10 M. ft., B.M.	Block paving around manhls, 150 sq. yds.	Total.
Daniel Lynch, Dorchester, Mass.	$0.50	$1.00	$1.50	$2.00	$3.80	$6.00	$8.00	$5.00	$4.50	$0.06	$0.12	$0.20	$0.30	$0.08	$30.00	$0.60	$20,966
John Walker, Newmarket, N. H.	.50	.90	1.50	2.50	2.00	2.00	2.00	4.00	4.00	.15	.25	.50	.20	.10	25.00	.75	20,875
John Cavanagh, Quincy, Mass.	.53	.87	2.00	1.00	2.50	7.00	1.00	4.50	5.00	.10	.10	.15	.15	.30	15.00	.30	19,982
H. A. Hanscom & Co., West Medford, Mass.	.48	.79	2.00	2.00	2.00	4.00	6.00	4.50	4.50	.12	.20	.20	.14	.10	35.00	1.00	19,497
William Cashman, Quincy, Mass.	.50	.70	2.00	2.00	3.50	5.00	6.00	4.50	4.00	.10	.10	.20	.15	.10	20.00	.50	18,822
C. E. Trumbull & Co., Boston, Mass.	.45	.70	1.00	1.50	2.00	4.00	6.00	5.50	4.00	.10	.15	.20	.27	.10	14.00	1.25	18,774
A. W. Bryne Const'n Co., Boston, Mass.	.48	.66	1.00	1.00	3.00	4.00	4.00	5.00	4.00	.10	.15	.20	.25	.15	15.00	1.00	18,770
Bruno & Salomone, East Boston, Mass.	.42	.79	1.50	1.50	3.95	4.70	5.50	5.75	3.50	.10	.13	.16	.20	.04	30.00	.35	18,447
Wm. J. Fitzgerald, Dorchester, Mass.	.48	.75	1.05	.75	3.50	2.50	3.00	4.60	4.25	.09	.12	.15	.12	.03	27.00	.55	18,056
T. H. & G. M. Bryne, Hyde Park, Mass.	.45	.55	1.50	1.50	3.00	4.00	4.00	4.75	4.00	.10	.10	.15	.20	.10	15.00	.90	17,454
Kelley & O'Hearn, Brookline, Mass.	.48	.70	1.50	1.50	2.00	6.00	8.00	5.00	2.50	.05	.10	.10	.05	.05	20.00	.60	16,347
Aab & Co., Waltham, Mass.	.34	.86	1.10	1.00	.02⅞	.03⅛	4.00	3.50	.02⅞	.16	.22	.33	.01	.001	22.00	.01	15,852
Long & Little, Leominster, Mass.	.36	.57	1.75	2.50	2.00	5.00	5.00	5.00	3.75	.09	.15	.15	.15	.10	20.00	1.50	15,800
J. D. Kelly, Clinton, Mass.	.39	.65	.88	1.00	4.00	4.00	7.00	4.50	3.50	.07	.10	.12	.14	.12	20.00	.30	15,779
Michael Russo, Boston, Mass.	.35	.60	.90	1.75	2.75	2.75	3.00	3.75	4.00	.04	.06	.09	.06	.05	30.00	.75	13,379
McDowell & Son, Mattapan	.30	.51	.98	1.50	2.00	2.25	3.50	3.00	1.75	.10	.14	.16	.12	.10	20.00	.45	12,697

BRICK PAVING.—Albany, N. Y.—The following bids were received June 6 by the board of contract and apportionment for brick paving in Second St., from Quail St. to New York Central Ave.; T. Henry Dumary, who was awarded the contract, bid on Helderburg, Rosendale, Atlas, Portland cements and Catskill brick; Mulderry Bros. bid on Hoffman, Rosendale, Atlas, Portland cements and Catskill brick:

Quantities.		T. Henry Dumary.	Mulderry Bros.
Vitrified brick	9,300 sq. yds.	$0.65	$1.85
Granite crb, straight	5,390 lin. ft.	.25	.45
Circular	100 " "	.25	.75
Relaying:			
Pavement, sand	100 sq. yds.	.45	.40
Concrete	5 " "	.50	1.25
Curb, on sand	50 lin. ft.	.20	.20
On concrete	10 " "	.60	.50
New brick sidewalk	1,600 sq. ft.	.08	.08
4-ft. flag sidewalk	1,900 " "	.14	.14
Relaying sidewalk	9,800 " "	.03	.02½
Receiving basins	7 each	60.00	65.00
Trench & 6-in. pipe	400 lin. ft.	.30	.45
6-in. bends	25 each	.40	.25
Labor on backfilling	50 days	1.50	1.50
Total		$23,624	$26,672
Days to complete, at $5 a day		25	30

WATER-WORKS.—Parnassus, Pa.—We are informed that the following bids were received May 19 for constructing works, as advertised in Engineering News; S. A. Taylor, Engr., 339 5th Ave., Pittsburg, Pa.: Cast-iron water pipe, 360 tons, Chandley Bros. & Co., Beaver Falls, Pa., $16.75 a ton; South Pittsburg Pipe Works, South Pittsburg, Tenn., $15.80 and $16.80; Southern Pipe Co., Anniston, Ala., $16.24; National Foundry & Pipe Works, Scottdale, Pa., $15.90; Cronnen & O'Herron, Pittsburg, $16.00; Jas. B. Clow & Sons, Chicago, $15.50; McNeal Pipe & Foundry Co., Burlington, N. J., $18.22. Special castings, 16,000 lbs., Chandley Bros., 2.5 cts. a lb.; So. Pittsburg Pipe Works, 1.75 cts.; Southern Pipe Co., 1.9 cts.; National Foundry & Pipe Works, 2 cts.; Cronnen & O'Herron, 2 cts.; Clow & Sons, 2 cts.; McNeal Pipe & Foundry Co., 1.9 cts. Hydrants, 50, Chandley Bros., $21.00 each; J. Thompson & Co., Philadelphia, $20.50; Rensselaer Mfg. Co., Troy, N. Y., $21; Michigan Brass & Iron Works, Detroit, $22.50 and $19.50; Corbin Mfg. Co., Allegheny, Pa., $20.75; Bourbon Copper & Brass Works, Cincinnati, $19; Cronnen & O'Herron, $17. Gate valve, 12-in., Chandley Bros., $35; Rensselaer Co., $32; Mich. Brass & Iron Works, $25 and $20; Cronnen, $25. Valves, one 10-in., three 8-in., 14 6-in. and 9 4-in., Chandley Bros., $25, $18, $10 and $6, respectively; Thompson & Co., no 10-in., $14.50, $8.75, $5.90, respectively; Rensselaer Mfg. Co., $26.50, $16.50, $11.20 and $7.20; Michigan Brass & Iron Works, no 10-in. valve, $14.50, $9.50, $5.50; Bourbon Copper & Brass Wks., $19.60, $13.50, $8.75 and $5.00; Cronnen, $25, $13.50, $8.75 and $5.00. Valve boxes, 26, Chandley Bros., $2.50 each; Thompson & Co., $2.50; Rensselaer Mfg. Co., $2.50; Michigan Brass & Iron Works, $2.50; Bourbon Works, $2.18; Cronnen, $2.18. Pipe laying, 360 ft. of 12 and 10-in., 2,592 ft. of 8-in., 11,100 ft. of 6-in., 10,633 ft. of 4-in. pipe, Chandley Bros., $1.00, 75 cts., 13 cts. and 11 cts. a ft, respectively; Accattra & Co., Pittsburg, 70 cts., 66 cts., 20 cts., 17.5 cts., 15 cts.; Toronto Construction Co., Toronto, Ohio, no 12 or 10-in. pipe laying, 17 cts., 15 cts. and 13 cts.; Ott Bros., Allegheny, $1.50, $1.50, 22 cts., 20 cts., 18.5 cts; Jas. G. Corcoran & Co., Pittsburg, no 12 or 10-in. pipe, 20 cts., 16 cts., 14.5 cts.; Cronnen, $1.00, 95 cts., 17 cts., 13 cts., 13 cts. Excavating foundation, Accattra & Co., 48 cts a cu. yd.; Corcoran & Co., 40 cts.; Cronnen, 50 cts. Rubble masonry and for water tank, Accattra & Co., $3.50 and $10.00 a cu. yd., respectively; Corcoran & Co., $7.50; Cronnen, $4.50 and $8.00. Concrete, Accattra & Co., $3.35 a cu. yd.; Corcoran & Co., $6.25; Cronnen, $450. Rock in trenches, Chandley Bros, $1.50 a cu. yd.; Accattra & Co., 70 cts. a cu. yd.; Corcoran & Co., $1.50; Cronnen, $1.50. Duplex pump, Chandley Bros., $775. Triplex pump, Chandley Bros., $800; Demming Pump Co., Salem, O., $895; Stilwell-Bierce & Smith-Valle Co., Dayton, O., $876 and $901; Goulds Mfg. Co., Seneca Falls, N. Y., $1,548; Cronnen, $975. Gas engine, Chandley Bros., $800; Pierce Branch Engineering Co., Beaver Falls, Pa., $1,010; Goulds Mfg. Co., $950; Cronnen, $800; Westinghouse, Church, Kerr & Co., New York, $1,210. Pumping plant, Goulds Mfg. Co., $2,348; Cronnen, $1,760. Filter plant, Chandley Bros., $300; Cronnen, $620. Pumping station, Chandley Bros., $400, $640. Stand-pipe, with foundation and without foundation, Chandley Bros., $2,000 with; Standard Boiler & Bridge Co., Bellaire, O., $2,088 and $1,868, respectively; Cronnen, $1,723 and $1,500. Stand-pipe, 25 × 65 ft. and 30 × 60 ft., Chandley Bros., $2,000 and $2,600, respectively; Standard Boiler & Bridge Co., $2,198 and $2,588; Cronnen, $2,135 and $2,700. Plant complete, Chandley Bros., $15,525; Cronnen & O'Herron, $15,800; Jno. P. McIntyre, McKeesport, Pa., $16,434. On account of legal complications no award has yet been made, made.

INDUSTRIAL NOTES.

THE CHAMBERSBURG ENGINEERING CO., Chambersburg, Pa., is reported to have an order from the Pittsburg Locomotive Works, Pittsburg, for what is said to be the largest riveting machine ever made, weighing 80,000 lbs.

THE WESTON ENGINE CO., Painted Post, N. Y., is reported to have made a general assignment June 4 to Mr. John B. Stanchfield, Elmira, N. Y. The firm of A. Weston & Co., bankers, of the same place, is included in the assignment.

THE CARLISLE MFG. CO., Carlisle, Pa., whose failure was noted about two years ago, will have its plant sold at public auction June 18, as is stated in an advertisement on page XVIII. of this paper. Mr. L. R. Brenneman is the Receiver for the company and Mr. John Hays, Trustee.

THE BUFFALO FORGE CO., Buffalo, N. Y., recently supplied the J. K. Farley Mfg. Co., Chicago, Ill., with a fan drying and cooling apparatus, consisting of steel plate fan, engine and heater, for use in drying gumdrops and other confectionery.

THE BROOKS LOCOMOTIVE WORKS, Dunkirk, N. Y., is reported to have an order from the Hankwai Ry. of Japan for three eight-wheel American type passenger locomotives, weighing 68,000 lbs. each, and two side-tank freight engines, weighing 95,000 lbs. each.

THE A. S. ALOE CO., St. Louis, Mo., has recently placed upon the market the "Ideal" brand of tracing cloth, especially adapted for tracing fine line drawings and for copying by the blue or black print process. It is put up in 24-yd. rolls and in 30, 36 and 42-in. widths.

THE WESTINGHOUSE ELECTRIC & MFG. CO., Pittsburg, is reported to have a contract to furnish the complete electrical equipment for the San Jose Light & Power Co., San Jose, Cal., at a cost of about $150,000. A contract is also said to have been received from the Tonawanda Power & Circuit Co., Tonawanda, N. Y., for four step-down transformers and two 500-HP. rotary transformers to be utilized in supplying Niagara power to the latter city.

THE PITTSBURG BRIDGE CO., Pittsburg, through its New England agents, Collins & Norton, Springfield, Mass., has lately secured contracts for three bridges at Becket, Mass., two bridges at Whately, Mass., a bridge at Cheshire, Mass., and one on the new state road at Russell, Mass.

THE BERLIN IRON BRIDGE CO., East Berlin, Conn., is erecting the structural steel work of two large new buildings for the Wilmot & Hobbs Mfg. Co., Bridgeport, Conn., to be used as an engine and plating room and a machine or manufacturing building. The former is 60 × 100 ft., two stories high, of steel frame construction, with brick side walls and concrete floors. The machine building is about 80 × 135 ft., three stories high, of steel skeleton construction throughout. The floors are designed for heavy loads and are carried on corrugated iron arches supporting concrete filling.

THE MOORE MFG. CO., Cleveland, O., formerly of Milwaukee, Wis., has changed its company name to the Chisholm & Moore Mfg. Co., and has increased its capital stock to $150,000. The company has bought a lot, 266 × 331

THE SPRINGFIELD BOILER & MFG. CO., Springfield, Ill., is busy at present in all its departments. It has done considerable U. S. government work, especially in building dredges for the Mississippi River Commission, and recently completed the "Epsilon" and the "Zeta." Among contracts on hand are the following: Two filter tanks for Elgin, Ill., each 10 ft. in diameter; six miles of 36-in. and one mile of 12-in. steel riveted pipe; a number of boilers, including a Scotch marine boiler for use on the Mississippi River, and a stand-pipe for the Milan, Mo., water-works. Mr. C. W. Hawkes, Supt., advises our representative that a new set of rolls which will roll 1½-in. plates, 16 ft. long, was recently ordered for the plant.

NEW COMPANIES.—Atlantic Brake Co., Baltimore, Md.; $5,000,000, commencing with $25; to manufacture brakes and railway appliances; Geo. A. Boyden, L. J. Guinn, E. A. Thompson, and J. H. Foster, all of Baltimore.

Automatic Dumping Boat Co., New York; $1,500,000, commencing with $1,200; to manufacture and sell boats for dumping ashes, garbage, etc.; J. A. Wood, Chas. W. Smith, and R. C. Strachan, of Brooklyn, N. Y.; J. R. Cosgrove and R. E. Lester, New York.

Lake County Telephone Co., Libertyville, Ill.; $2,500; James Turnock, Joseph A. Seyl and T. Degen.

Nearly Every Prominent Contractor and Manufacturer of Contractors' Supplies READS ENGINEERING NEWS

AVAIL YOURSELF OF THIS PAPER WHEN BIDS ARE WANTED FOR CONSTRUCTION OR FOR FURNISHING SUPPLIES.